

NETWORKWORLD

Maximize your return on IT ■ www.networkworld.com

December 7, 2009 ■ Volume 26, Number 34 ■ \$5.00

CLEAR CHOICE TEST: ANTIMALWARE GATEWAYS

McAfee wins Web security shootout

All five products tested deliver online protection against zero-day threats. **PAGE 24**



iPhone winning over IT security skeptics

BY JOHN COX

APPLE'S IPHONE IS slowly but surely winning over some enterprise security skeptics. As a result, it's now showing up alongside, or instead of, Research in Motion BlackBerries and Microsoft Windows Mobile handsets, even though Apple offers none of the security and management features that are hallmarks of those two platforms.

With the release this year of iPhone OS 3.0, the popular handset is capable of a more advanced mobile symbiosis, relying on the Microsoft Exchange security and management features that are accessed via Apple's implementation of Microsoft ActiveSync. Coupled with a greatly



improved iPhone Configuration Utility (ICU), the new operating system has gotten high grades.

From its birth in 2007, the iPhone has been criticized for lacking enterprise security and Apple for not caring about it, given the company's consumer focus with the popular smartphone. That began to change in 2008, when Apple introduced support for ActiveSync, enabling an Exchange administrator to erase all the data on a lost or stolen iPhone, for example. The 3.0 release in June 2009 added more improvements, and some observers expect even bigger security changes in 2010.

See iPhone, page 12

Novell makes pitch for bigger role in virtualization security

BY ELLEN MESSMER

NOVELL THIS WEEK will lay out an ambitious plan to secure applications across heterogeneous virtualization platforms, an effort designed to play off Novell's strengths in network and identity management.

Novell's Intelligent Workload Management initiative will be designed for the creation of application workloads, described by the

company as portable, self-contained units of work built through the integration of the operating system, middleware and application, to run on server virtualization products from VMware, Microsoft and Citrix, among others. Under the plan, workloads will maintain security and compliance policies, along with real-time reporting and monitoring capabilities, wherever they go.

The company says it will roll out eight

See Novell, page 16



Management companies to watch

IT management newcomers tackle problems in ways industry veterans haven't yet. **PAGE 24**



Network Security. It's what we're made of.

MANAGED SECURITY SERVICES FROM AT&T. When it comes to system security and protecting your network, trust your business data to the architect and overseer of the world's largest wired and wireless network. With AT&T's vast security expertise, we can assess vulnerabilities, help protect your infrastructure, detect attacks and respond to suspicious activities. Taking care of the hidden dangers, so you can focus on the work that's in front of you. That's how AT&T helps your business **Stretch**.

att.com/dnasecurity



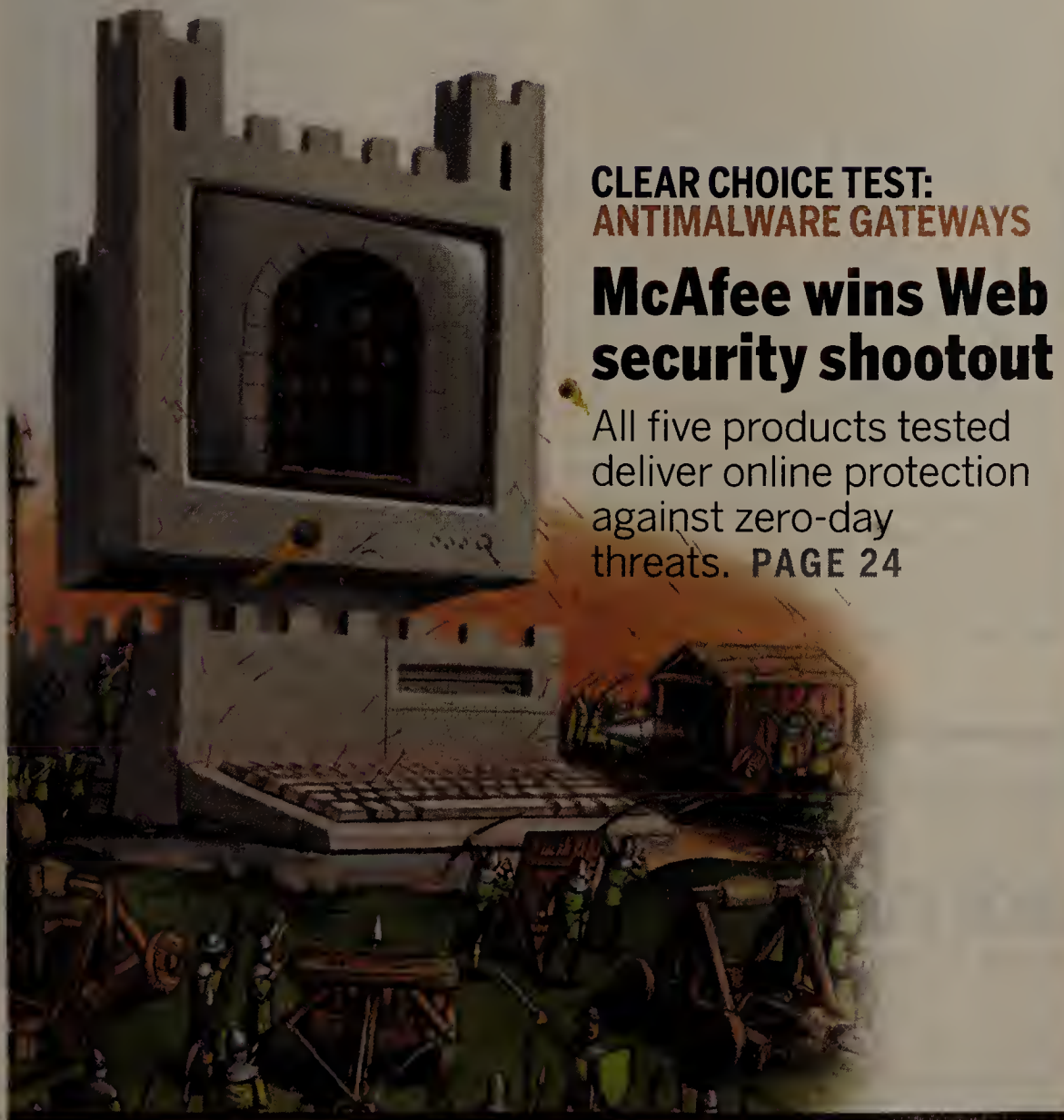
at&t

Your world. Delivered.

12/7/09

NETWORKWORLD

- 10 **News Analysis** Which OS is best for app development?
- 14 **News Analysis** Taming IT management complexity.
- 16 **Risk and Reward** Security reviews: Good riddance to 2009. BY ANDREAS ANTONOPOULOS
- 20 **Tech Update** Reducing data center energy use.
- 22 **Gear Head** Popoplug: A wolf in sheep's clothing. BY MARK GIBBS
- 22 **Cool Tools** It's an app world after all. BY KEITH SHAW
- 34 **BackSpin** Keeping us safe the Sprint way. BY MARK GIBBS
- 34 **Net Buzz** Dragon's holiday gift ad won't win over parents. BY PAUL MCNAMARA



CLEAR CHOICE TEST: ANTIMALWARE GATEWAYS

McAfee wins Web security shootout

All five products tested deliver online protection against zero-day threats. PAGE 24

GOODBADUGLY

AT&T, Verizon drop suits

Expect to see more of Verizon's "there's a map for that" advertisements. On Dec. 2, AT&T asked the court to dismiss its lawsuit that sought to prevent Verizon from continuing to run the commercials. Verizon also dropped the suit it filed against AT&T in response, according to an AT&T spokesman. The Verizon ads at the heart of the dispute display two maps of the U.S., one showing AT&T's sparse 3G coverage and the other showing Verizon's more extensive 3G network. AT&T argued that the ads implied that customers get no coverage at all outside of the 3G network. But Verizon pointed out the ads clearly state that both maps show 3G coverage.

AT&T customer satisfaction tanks

AT&T got some bad news from *Consumer Reports* this week, as the magazine's latest survey shows that the carrier now has the lowest level of customer satisfaction in the United States. AT&T got its lowest marks in the survey for its voice services, as it was the only wireless carrier in the United States to receive below-average marks for its voice quality. Verizon received above average marks for its voice service while T-Mobile and Sprint both received average marks. AT&T also received subpar remarks across the board for its customer service.

Search for ET lands net admin in hot water

The *Arizona Republic* reported that the search for intelligent life beyond Earth — using computers belonging to the Higley Unified School District — has cost a network systems administrator his job. The report states that Brad Niesluchowski, a heavy user of the SETI@home distributed computing program, resigned from his job in October following an investigation into "suspicious activity." Documents obtained by the Republic show allegations that the sysadmin's use of the volunteer computing program across school district computers could add up to more than \$1 million in costs associated with energy usage, equipment loss and more. However, the alleged unauthorized use of SETI@home on the computers appears to be only part of the problem, since Niesluchowski in the documents is also alleged to have swiped computers and other equipment from the district and taken them home, according to the Republic.

CONTACT: Network World, 492 Old Connecticut Path, Framingham, MA 01701-9002; Phone: (508) 766-5301; E-mail: nwnews@nww.com; **REPRINTS:** (717) 399-1900; **SUBSCRIPTIONS:** Phone 877-701-2228; E-mail: nww@omeda.com; URL: www.subscribenww.com

An apology or a smokescreen?

Re: Prevx apologizes, backtracks on claims that Microsoft patch causes black screen (<http://tinyurl.com/yzwq8uf>):

So what are the odds that it was Prevx's software that caused it in the first place? Their statement sounds just like the kind my kids make after they smack their sibling in the head with something and then try and give a detailed explanation of what happened, clearly showing the involvement of the other sibling and how their actions ended with the head whacking, but offering very little detail about what they were actually doing themselves, other than generalities. 'I was just sitting here, playing by myself, swinging my arms back and forth, and then MSFT walks through and just walks right into me while I was singing and thinking about how much I enjoy MSFT's products and then they're on the ground crying that they got popped in the head by something. My hand was sore, but I'm not sure if it hit them or the wall, and in any event I really had nothing to do with it, so...'

[Prevx's] statement sounds just like the kind my kids make after they smack their sibling in the head with something and then cry and give a detailed explanation of what happened.

Microsoft patches are good for repair business

Re: Microsoft denies that its patch causes BSOD (<http://tinyurl.com/ygtinnv7>):

I don't know how many systems my husband has repaired because of the patches causing the BSOD — in the past two days alone. I have a sort of flickering problem. My computer seems to turn itself on and off when it wants to. It didn't happen until it updated. So go ahead and tell me that it's not the patch. I have Windows XP Professional running on an HP rp5000. Never had a problem until I finally relented and installed the updates. The first and last time I chose Express install. I have never before allowed automatic update to run. This time I didn't have time to look into the patches and I got screwed. And of course Microsoft doesn't want to admit it's their

fault again, not after what happened in October — why would they? I'm done with Microsoft and if the patch problems keep up I will go back to Linux and be done with it for good.

JC Torpey

Limit patent ownership to people

Re: Patent trolls, Machiavelli's descendents (<http://tinyurl.com/yfkz9kf>):

The problem is caused by allowing vampire (undying) corporations to 'own' patents. In reality, the only innovators are humans, and thus only a natural person should be able to own a patent. And then lease it out, on a non-exclusive basis, if any desire to use it.

The same problem occurs in the area of copyright. We are now very far away from that clause in the U.S. Constitution recognizing a limited property right for natural persons.

Anonymous

Don't forget the patient

Re: Harvard study: Computers don't save hospitals money (<http://tinyurl.com/yj8xhmv>):

The computer systems targeted by the government funding is for the benefit of patients, not hospitals. One goal is to increase medical record access and sharing. There are many cases where patients have to spend more because they need to retake tests they had already taken, have been given incorrect medication, incorrect amounts, or interaction problems because accurate records were not kept. There are cases where diagnoses was not fast enough, or wrong, because they did not have the patient's full medical records. Imagine if a doctor had full access to a patient's medical records for an unconscious person in an emergency room. How much faster that person could get help and have better care. This "study" seems to be aimed toward the "business" and "accounting" side of things vs. the more important goal of helping people at a reasonable cost with quality health care.

Anon

CEO: Mike Friedenberg
CHIEF CONTENT OFFICER/SVP: John Gallant
EDITOR IN CHIEF: John Dix

News

ONLINE EXECUTIVE EDITOR, NEWS: Bob Brown
ONLINE NEWS EDITOR: Michael Cooney
ONLINE NEWS EDITOR: Paul McNamara
ONLINE ASSOCIATE NEWS EDITOR: Ann Bednarz
(612) 926-0470

Net Infrastructure

SENIOR EDITOR: John Cox (978) 834-0554
SENIOR EDITOR: Tim Greene
SENIOR EDITOR: Ellen Messmer (941) 792-1061
MANAGING EDITOR: Jim Duffy (716) 655-0103

Enterprise Computing

SENIOR EDITOR: John Fontana (303) 377-9057
SENIOR WRITER: Jon Brodwin

Application Services

NATIONAL CORRESPONDENT: Carolyn Duffy Marsan, (317) 566-0845
SENIOR EDITOR: Denise Dubie

Service Providers

SENIOR WRITER: Brad Reed

Print Layout/Web Production

MANAGING EDITOR: Ryan Francis
COPY CHIEF: Tammy O'Keefe

Design

EXECUTIVE ART DIRECTOR: Mary Lester
ASSOCIATE ART DIRECTOR: Stephen Sauer

Features/New Data Center Supplements

EXECUTIVE FEATURES EDITOR: Neal Weinberg

Clear Choice Tests

EXECUTIVE FEATURES EDITOR: Neal Weinberg
LAB ALLIANCE PARTNERS: Joel Snyder, Opus One; John Bass, Centennial Networking Labs; Barry Nance, independent consultant; Thomas Powell, PINT; Miercom; Thomas Henderson, ExtremeLabs; Travis Berkley, University of Kansas; David Newman, Network Test; James Gaskin, Gaskin Computing Services; Craig Mathias, FarPoint Group
CONTRIBUTING EDITORS: Daniel Briere, Mark Gibbs, James Kobielus, Mark Miller

networkworld.com

EXECUTIVE ONLINE EDITOR: Jeff Caruso, (631) 584-5829
COMMUNITY EDITOR: Julie Bort, (970) 482-6454
PROGRAMMING DIRECTOR: Keith Shaw, (508) 766-5444
EDITORIAL OPERATIONS MANAGER: Cheryl Crivello
OFFICE MANAGER, EDITORIAL: Pat Josefek
MAIN PHONE: (508) 766-5301
E-MAIL: first name_last name@nww.com

■ Get the e-dition

Network World can be delivered right to your desktop, view it at: www.nwdocfinder.com/8734

One-Day IT Event Coming to a City Near You!



- 10-IT tracks; Vendor Expo; Peer Case-Studies
- Feature sessions include: Security; WAN Services; Network Management; Virtualization; Data Centers; SaaS; Green IT; UC; VoIP; Mobility; Application Delivery

- The schedule is filling up for 2010. New York on Jan. 27.
- Register and qualify to attend free!

www.nwdocfinder.com/9721





HOW MANY I.T. PEOPLE DOES IT TAKE TO MANAGE A NETWORK?

Find out at TheNewNetworkIsHere.com/control



JUNIPER[®]
NETWORKS

BLOGOSPHERE

■ **Apple wins legal battle with Psystar as clonemaker stops selling Mac clones in wake of Judge's ruling.** *Network World* blogger Yoni Heisler reports that after months of legal wrangling, Apple finally emerged victorious in its battle to prevent Mac clonemaker Psystar from selling non-Apple hardware with pre-installed copies of OS X. Apple had sued Psystar in July 2008, and rather than closing up shop as many had expected, Psystar put up a determined fight to challenge Apple's business model of tying its operating system to its own hardware. The law was simply on Apple's side as the judge presiding over the case in California, Judge William Alsup, granted Apple's motion for Summary Judgment when he found that Psystar's actions violated Apple's copyrights in OS X. Furthermore, Alsup ruled that Psystar had violated the DMCA for writing software that worked to circumvent security measures in OS X that prevent it from running, at least in theory, on non-Apple hardware. In the wake of that ruling, Apple asked the court for a permanent injunction that would bar Psystar from selling its clones. And because litigation is anything but cheap, Apple also requested damages totaling more than \$2 million — a figure that encapsulates Psystar's copyright and DMCA violations. In a joint order/stipulation released last week, Alsup ruled that Psystar hand over nearly \$2.7 million in damages to Apple. But in a concurrent agreement, Apple and Psystar agreed that all judgments owed would not need to be paid until Psystar exhausts the appeals process. Apple also agreed that it would drop any remaining claim.

<http://tinyurl.com/ygvkweg>

■ **Google changes rules for Google News to placate publishers.** *Network World's* Google Subnet notes that Google has decided to limit the amount of copyrighted material owned by publishers that it gives away for free in an attempt to placate publishers who are, understandably, not happy with the situation. Previously, Google would offer for free content a publisher wanted to gate and charge for. Google in essence forbade publishers from charging for their content when users came to that content via Google News. If a user found an article on Google News and clicked on it, the publisher could not direct the user to a "pay for this first" screen. Instead, Google gave searchers the full article via its "First Click Free" program. Google would show the whole article, but those visiting the publisher's Web site directly would have to pay for it to see it. Google called the practice of hiding an article behind a plea for money "cloaking" and would not honor it. <http://tinyurl.com/yzugxl>

ITVIDEO Interviews, the Coolest Tools and More



IDG News Service

OLED screens get flexible

A flexible, color OLED screen suitable for next-generation portable and wearable devices was unveiled last week by Taiwan's Industrial Technology Research Institute.

<http://tinyurl.com/yaqgbnb>

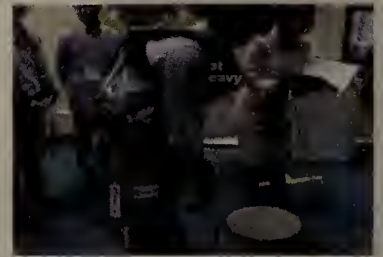


IDG News Service

Japan's hottest robots

A robot that builds Lego models is among the attractions at this year's International Robot Exhibition that got underway last week in Tokyo.

<http://tinyurl.com/ycclsk4>



IDG News Service

Japanese robotic muscle suit

Students at Tokyo's University of Science have developed a new version of their muscle suit, a wearable robotic suit that assists the muscles when carrying out strenuous tasks.

<http://tinyurl.com/y9fkqf>



Best of NWW's
NEWSLETTERS

Is certification valuable? We have the definitive answer

IT Best Practices: I've always held the belief that certifications are important, but there are quite a few people who make the argument that certifications aren't relevant. A case can be made either way. Now, an in-depth three-year IDC study provides real data that shows the relationship between training, certification and the functional performance of teams of IT professionals. IDC's 36-month study surveyed more than 1,100 IT managers who are responsible for more than 3,000 teams. The survey asked for details about more than 80 IT performance metrics in 26 functional domains, which include deployment, development, management, security, storage and support. Having analyzed all that data, IDC has come to the conclusion that certification in relevant areas matters, and here's why. Increasingly, companies are relying on their IT departments to go beyond simply deploying and operating IT systems. IT departments are often included in business transformations and process improvements that will help the business grow and become more profitable. This means the department needs to have a staff of people with both business acumen and IT knowledge and skills.. <http://tinyurl.com/yko6wye>

Security Strategies: Our debate today concerns the proposition that criminal hackers are a national resource and should be cultivated as valuable contributors to national and corporate security. I utterly reject this proposition. No, society must not reward criminal behavior. Criminal hackers — those who break the law by intruding into computer systems and networks without authorization and those who steal services from telecom companies — must not be rewarded for their criminality. If you needed to evaluate the security of your home, which would you hire: a burglar who claimed to be an ex-burglar or a bonded security specialist with no criminal tendencies. The fundamental problem with hiring criminal hackers is their complete lack of credibility. Criminal hackers believe in lying and cheating as a bedrock of their hobby; they misrepresent themselves to the security system and to the human beings they can trick into revealing privileged information. Their credo is tainted by the video-game fallacy: if it is possible to do something, it must be right. Morality exists for them only as a technical constraint: if you think something is wrong, make it impossible to accomplish. <http://tinyurl.com/ylqr2s>

SIMPLICITY IS POWER

The power of high-def desktops.

It's more than a desktop. It's an immersive experience.

Deliver a vibrant, personalized, high-definition desktop

to any device, across any network, with

Citrix® XenDesktop™. Now you can
dramatically simplify desktop

management without compromising
user experience. Industry-leading

HDX™ 3D technology
makes it possible.

On PCs

or Macs. Laptops

or smartphones.

Users are in for an

unparalleled experience for everything from

applications to rich media. That's the power of desktop

virtualization at work. And everywhere else, too.

Simplicity is power. Citrix.

CITRIX®

Citrix.com/SimplicityIsPower

Cisco wins Tandberg with 91.1% stake

After a hard fought battle, Cisco has won control of videoconferencing leader Tandberg by securing ownership of 91.1% of the company's shares. Cisco had to raise its \$3 billion offer and extend the acceptance deadline three times after its initial offer, made on Oct. 1, was rejected by more than 90% of Tandberg shareholders. Two groups of shareholders and two investment firms representing other stakeholders argued that Cisco was undervaluing Tandberg. Cisco relented on Nov. 16, raising its offer to \$3.4 billion. By acquiring Tandberg, Cisco is looking to fill its desktop and mid-range videoconferencing product portfolio. Cisco views video as the "killer app" that will fill up bandwidth and drive equipment upgrades into the next decade. <http://tinyurl.com/ydmeyql>

New study calls for cybersecurity overhaul in U.S. The U.S. government and private businesses need to overhaul the way they look at cybersecurity, with the government offering businesses new incentives to fix security problems, the Internet Security Alliance said. The alliance, in a report released last week, also called for permanent international cybersecurity collaboration centers, new security standards for VoIP communications and programs to educate corporate leaders about the benefits of enhanced cybersecurity efforts. The report proposes to create more educational programs on risk management for C-level executives. <http://tinyurl.com/yb8de6d>

Researchers develop 3-D squeezable input device. A team of researchers has developed a squeezable mouse-like input device that gives three-dimensional control to its users. The device is called Suma, short for satsuma or the mandarin fruit, said Duncan Smith, head of consumer product development for Cambridge Consultants. Inside Suma's pliant foam are light actuators surrounding a sensor core. As Suma is squeezed, the actuators detect pressure and movement changes. Those signals are processed with software inside Suma and then sent to the software program that can accommodate the device. The difference between Suma and a controller for Nintendo's Wii, for example, is that the

users move objects but not manipulate the shape, which has the potential for a new range of applications, Smith said. The Suma is "very much a whole picture of the inside of your hand," he said. <http://tinyurl.com/yjlzste>

2009's most awesome Android apps.

Google last week named the winners of its second contest aimed at encouraging software developers to make applications for the Android mobile operating system. The overall winner of the Android Developer Challenge 2 was SweetDreams, an app that helps users sleep at night by sending late calls straight to voice mail. Second prize went to What the Doodle!?, a multiplayer game of online Pictionary, and third place went to WaveSecure, a mobile security app that backs up data and lets users track their phones and wipe all data in the event a phone is stolen. This year's crop shows off an enormous variety of complex applications. <http://tinyurl.com/yfm58tz>

SAP readying potential Google Wave rival.

SAP plans to release a "virtual war room" decision-making tool dubbed Constellation, which could be a potential rival to Google's heralded Wave collaboration platform. Constellation will consist of a cloud-based tool (currently in private beta under the code name 12Sprints) accessible via a Web browser, as well as an on-premises component that will let users tap securely into their company's various data stores. "When you're working in the cloud and you

have the right [security] credentials, you can tunnel into your enterprise and forage among all the ERP data, all the unstructured data, all the petabytes of BI data you have, and just access it through that one point in the cloud," said SAP official David Meyer. <http://tinyurl.com/yam5qzg>

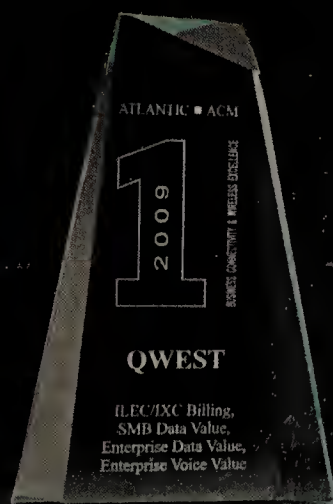
Skype opens up SIP business service to everyone. Any business that has a corporate VoIP system can now use Skype's SIP trunking service as a way to cut the cost of corporate phone bills. The Skype for SIP program went into general beta testing last week after being in limited beta since spring. With the service customers can: enable click-to-call buttons on Web sites; receive inbound calls from Skype endpoints for no extra cost; set up direct-inward-dialing Skype phone numbers that reach desktops through IP PBXs; and, make outbound calls through IP PBXs via supplemental Skype Out service. Skype has certified Cisco, Shortel and SIPfoundry IP PBXs to work with Skype for SIP and has 20 other vendors including Avaya that are working toward certification. <http://tinyurl.com/yl4aakw>

Broadcom buying Dune Networks for cloud switching. Broadcom has agreed to acquire Dune Networks, a privately held maker of high-speed switch fabrics, for about \$178 million. Dune was founded in 2000 and sells chipsets for high-capacity network equipment. Its SAND switch fabric can scale up from 10Gbps to 100Tbps in total capacity and support individual ports with speeds up to 100-Gigabit Ethernet. It is designed as the heart of switches for data centers, enterprise LANs, and carrier core and edge routers and Carrier Ethernet platforms. The acquisition will help to meet growing demands for cloud computing infrastructure, Broadcom said. <http://tinyurl.com/yh9e8d4>

IBM stays tops as server market stabilizes, Gartner says. IBM retained its narrow lead over HP in the worldwide server market as sales began to stabilize during the third quarter. IBM took 31.7% of server revenue in the three months to Oct. 31, up a fraction from last year, while HP's share stayed more or less flat at 30.2%, according to Gartner. They were followed at a distance by Dell, Sun and Fujitsu. Server revenue overall dropped 15.5% from the third quarter last year, to \$10.7 billion. But it was up by 10.2% compared to the second quarter this year. "It is important to put the yearly declines into perspective," said Jeffrey Hewitt, a research vice president at the firm. The server market is "showing signs of stabilization." <http://tinyurl.com/y8deb4f>



A WIN, WIN, WIN, WIN,
WIN, WIN, WIN, WIN
SITUATION.



THANKS. Because the ATLANTIC-ACM awards are based on customer evaluations, we couldn't have won eight of them without you. We're humbled. We're honored. And to celebrate, we're going to keep delivering award-winning voice and data solutions. To find out what award-winning work Qwest can do for your business, visit qwestsolutions.com.

Get Qwest. Get Nimble.

Qwest 
BUSINESS

Which mobile OS is best for apps?

iPhone, BlackBerry are popular smartphone development choices; Android a wild card

BY BRAD REED

Let's say that you're a software developer who has created a hot new application for smartphones that you're certain is about to take the world by storm. Your work isn't quite done and here's the problem: not only will your brilliant and innovative application have to compete with several other applications that have similar ambitions, but it will have to compete with them over multiple platforms.

With so many different mobile operating systems on the market right now, it can be daunting for an upstart software developer to make a name for itself.

Not surprisingly, there's no one solution for software developers looking to thrive in the mobile application business. Every operating system has different strengths and weaknesses and something to offer developers. Take the iPhone's operating system, which has consistently received praise from users for its ease of use and for hosting an applications store that has well more than 100,000 apps to choose from. While this operating system sounds like a dream for many developers, some have said that the sheer number of apps they have to compete with has made the going tough.

"The iPhone is easier to develop for than other operating systems, but harder to make money on," says Paul Reddick, the CEO of software developer Handmark, which specializes in making mobile news applications. "Even though it's relatively easy to get your app onto the App Store, it's not easy when you have 100,000 people that you're rubbing shoulders with. So the key thing is to figure out how get yourself discovered."

Of course, the fact that so many developers want to make applications for the iPhone is more a sign of its success than of weakness. Additionally, some developers say that the device's uniform screen size makes creating applications for it a relative breeze. So while an application designed for BlackBerry or Android devices might have to be tweaked to fit different screen sizes, an app for the iPhone operating system will only have to fit into the iPhone's screen.

"The iPhone's biggest strength from a developer's standpoint is that it's one size fits all," says Keith Pichelman, CEO for Concrete Software, a company that specializes in developing popular games such as Sid Meier's Pirates for mobile platforms. "Those are the big challenges for all the other platforms that have wide variations in screen size."

However, Pichelman says the operating system that his company has most enjoyed working with so far has been that of the BlackBerry.

Breaking down the app stores

A look at the virtual stores for three popular platforms

Once you've developed your killer application, you've still got to sell it online. Here's a brief breakdown of the application stores run by Apple, Research in Motion and Google.

Apple's App Store

With more than 100,000 apps, it's the most popular app store around; sheer volume of apps available makes it harder to get noticed; Apple is generally lenient about what it allows on and it typically only takes a few days for apps to get approved.

RIM's App World

RIM is the most particular about what it allows onto its store and its App World has less than 10,000 applications to choose from; developers have praised RIM, however, for working with them if they are committed to developing for the platform; BlackBerry is the prime market for enterprise apps.

Google's Android Market

The easiest store to get your app onto, as you just upload it and start selling it; Google only takes down inappropriate apps after they've been flagged by users.

The best part, he says, has been the helpfulness of Research in Motion, which he says gives Concrete specific guidelines for how to get their apps approved and up on BlackBerry App World.

"They have been extremely helpful with tech contacts and with public relations contacts and it's been that way for years now," he says. "I would love to see Apple take a similar approach. From the outside view they're doing really well but it's just tough from our point of view working with them sometimes where we don't know what they're going to approve and not approve."

Shari Hoffman, the sales and marketing spokesperson for developer DataViz, shares Pichelman's view that RIM is very helpful toward application developers and says BlackBerry is the only operating system where DataViz's Documents to Go mobile office suite comes complementarily on the devices.

"RIM is great to work with at the primary level, and while I can't comment on what it's like working with them on the technical and development side, we haven't heard any complaints about them," she says.

Reddick, however, says that while RIM does a good job of maintaining relationships with developers, BlackBerry's operating system can present challenges to developers. For one thing he says it can be difficult to make a single application that is interoperable with the wide variety of BlackBerry devices.

"BlackBerry is not the easiest operating system to develop for since there are so many different versions of the OS," he says. "So writing things that will work on one device doesn't mean that they will work on others. Something that works on the Tour isn't guaranteed to work on the Bold."

The wild card

The big wild card to hit the mobile operating system market this year, however, has been Android. Because Google's mobile operating system is open source, any developer can access its source code and create apps without getting a license from Google.

Additionally, developers say it's a breeze to get your application on the Android Market, as Google does not act as a gatekeeper for which applications it allows. Rather, Google allows all apps onto the store and only removes inappropriate apps after they are posted.

Ilya Eliashevsky, the product manager for DataViz's Android product line, says Android provides a lot of different advantages for smaller developers because it lets developers simply post their app on the store and wait for the money to roll in if it catches a lot of peoples' attention.

"We created an account, uploaded our apps and then hit submit," he says. "Then the app just started showing up on devices and we saw sales immediately starting to roll in."

Looking more toward the future, Reddick thinks that these features will make Android a major player in attracting Web developers due to its open source structure and the fact that it's started to appear on a large range of devices over the past year.

"I can see Android having a lot of success in the future because it's an open operating system that's going to run across a lot larger range of devices from different manufacturers," he says. "It's beginning to get momentum from the developer community as well. . . . Right now if I were developing an app with the goal of getting near-term cash I would make sure to get it out on BlackBerry and the iPhone, but if I'm going after long-term growth I'd go with Android." ■

Untangling Complexity

A simple, open approach to IP telephony empowers ShoreTel's award-winning IP phone system to rise above other communication systems.

IP TELEPHONY is one of the most powerful tools in business today, enabling users to communicate, collaborate and innovate like never before. But too often, the benefits of IP telephony are overshadowed by the complexity and limitations of legacy architectures.

IT professionals are so taxed trying to administer, manage and scale these monolithic systems that they have little time left to strategically apply unified communications to meet business needs. Inevitably, users become frustrated and abandon what should be a revenue-generating opportunity for the organization.

ShoreTel completely eliminates this complexity with its sophisticated, feature-rich ShoreTel® IP phone system. The unique, easy-to-use, all-in-one design integrates unified communications and contact center capabilities with the IP phone system. It is also purpose-built for IP, which inherently simplifies deployment, administration and use, alleviating the burden that IP phones traditionally place on IT organizations. For instance, IT staff can manage the system and perform administrative tasks from anywhere in the network via an intuitive Web-based interface.

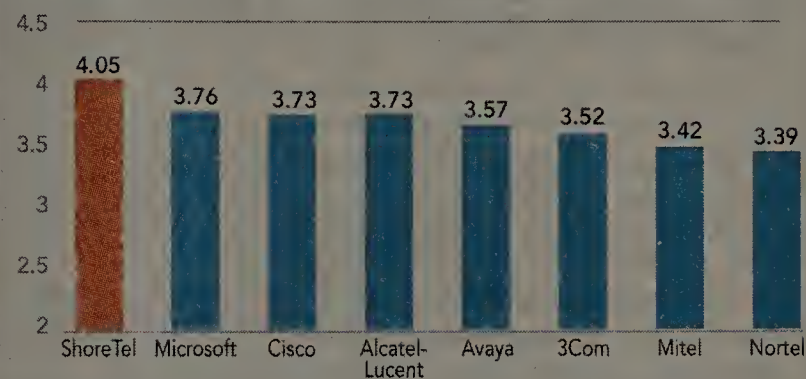
UNPARALLELED VALUE

In recognition of the power of this simplified and cost-effective approach, ShoreTel's IP communications system was recently named the winner for the sixth straight year of Nemertes Research's prestigious PilotHouse Award for IP Telephony. The award, which is uniquely based on feedback from business customers, puts ShoreTel at the head of the pack, beating out every competitor in every category, including value, customer service, sophistication of technology, management tools, ease of implementation and troubleshooting—all key areas that IT depends on for a successful voice-over-IP experience.

"The common thread among participants that favor ShoreTel is its value. Low prices, a broad set of features, scalability, strong customer service, and relatively less complicated deployment and troubleshooting requirements all contribute to ShoreTel's win," writes Irwin Lazar, vice president of Communications Research at Nemertes. ShoreTel ranked above the field of competitors, which includes Microsoft, Cisco, Alcatel-Lucent, Avaya, 3Com, Mitel and Nortel.

In its report, Nemertes quoted a director of telecom for a U.S. engineering firm who was excited about the powerful combination of

IP Telephony: All Vendors, Overall Scores



Source: 2009 Nemertes Research

IP telephony infrastructure, applications, management and security that ShoreTel provides. "We picked ShoreTel because of its enthusiastic VARs, low cost, wide support of SIP-trunking service providers, unified communications features and the scalability to grow as we grow," the director said.

SEAMLESS INTEGRATION

The heart of ShoreTel's system is a highly reliable and intelligent switch-based architecture that can unify communications across multiple locations, supporting IP phones, analog devices and a variety of trunk interfaces. This open architecture allows IT teams to easily preserve their investment in legacy equipment as well.

The open ecosystem also enables organizations to easily scale deployments and seamlessly integrate business applications. Users can gain instant access to business-critical applications such as Microsoft Dynamics CRM, NetSuite and Salesforce.com from within the ShoreTel® Call Manager dashboard.

Businesses of all sizes, including the San Francisco Giants and the Washington State Employees Credit Union, are now able to avoid complexity and realize the promise and simplicity of IP telephony using ShoreTel's IP communications system.

"We used to be No. 1 across Major League Baseball in terms of telecom costs," says Bill Schlough, CIO for the San Francisco Giants. "Those expenses were coming from our landlines. It was the simplicity and reliability of the [VoIP] architecture that ShoreTel had...compared to others that would require multiple racks and multiple points of failure that was the differentiator."

Learn more about ShoreTel's IP phone system at <http://shoretel.com/untangle>

 **ShoreTel®**

Brilliantly simple™

Produced by **NETWORKWORLD®**
Custom Solutions Group

■ **iPhone**, from page 1

Apple's absolute control over the hardware and software means the "iPhone has the potential of becoming the most secure mobile device on the market. They're going to get there," says David Field, device management and security architect for Enterprise Mobile, an IT services company that specializes in enterprise mobility and is backed by Microsoft.

Experts say for the iPhone to become a more solid enterprise option, Apple needs to make changes in two areas in the near future.

The first is support for over-the-air application downloads and firmware updates, perhaps by early 2010. Today, enterprise users need iTunes on their Mac or PC to get software and updates. "Companies don't want users connecting the iPhone to a PC" running iTunes, says Ken Dulaney, vice president of mobile computing for Gartner. "That's because they want to monitor and control what users are doing." With over-the-air downloads, enterprises can control deployment of authorized applications directly to the iPhone, and ensure fast fixes for software vulnerabilities or threats.

Second, expect Apple finally to lock the iPhone's boot loader to prevent the phone from being jailbroken. Jailbroken phones can load a new operating system image that discards many of the protections built into the official operating system, such as the sandbox architecture for applications, Field says. The sandbox is a self-contained "space" for the application, preventing or limiting access to data in other applications or hardware features.

Another possibility is closer cooperation by Apple with third-party security vendors. Gartner's Dulaney speculates that Apple may introduce a way for these vendors to exploit limited background processing (or multi-tasking) on the iPhone. That would let a security application connect with, monitor and control lower-level operating system and device functions. Dulaney says Apple has been talking with security vendors about this kind of lower-level access.

Some vendors are working with the Apple Push Notification Service, introduced earlier this year, to mimic multi-tasking. Apperian, a consulting company that's creating custom iPhone apps and software frameworks to support large-scale enterprise iPhone deployments, is creating an SDK to simplify this for security and management: a server sends an alert via the push service to the iPhone and wakes up a security application to run a check or report on a possible security breach.

Even without these expected changes, the iPhone today meets the basic security needs for a large number of enterprise customers.

"The iPhone gives you ActiveSync device management," Field says. "ActiveSync is becoming the de facto management and security platform for these lower-end security requirements."

Apple's security improvements create a basic foundation that supports a range of options for enterprise customers. "Some iPhone apps we build for enterprise customers are low-security

iPhone security: there needs to be more apps for that

While more will emerge, there are a variety of security options for enterprise iPhones. Here are some ideas for deciding what you need:

- Make use of both the Microsoft Exchange Server (Exchange Management Console and Exchange ActiveSync Mobile Administration Web Tool) and Apple's iPhone Configuration Utility (ICU), which was greatly improved with the 2009 Version 2.0.
- Evaluate the use of digital certificates on the iPhones.
- Learn to love iTunes and App Store, at least until Apple provides an enterprise over-the-air option for software updates and application downloading.
- If you must have on-device encryption, your only option is the iPhone 3GS.
- iPhone supports a number of VPN options; against the benefits weigh potential drawbacks like: IT support, VPN performance over wireless connections, and the endpoint security of the phone itself.
- Third-party vendors such as Boxtone, Good Technology, Sybase and Zenprise create a more intuitive GUI over underlying features of Exchange and ICU, and can add features on top of that, such as greater visibility into iPhone activities, over the air provisioning, device tracking and improved asset management.



applications, like searching a corporate directory or finding a location on a big campus," Apperian's CTO Bin Lee says.

At Chicago law firm Sonnenschein Nath & Rosenthal LLP, there was "tremendous demand" from lawyers to support iPhone as an alternative to the ubiquitous BlackBerry, recalls the firm's CIO, Andy Jurczyk. He resisted those demands until Apple improved security in 2008 with ActiveSync supporting Exchange policies. "It was enough for us to build on," he says.

Sonnenschein begins by provisioning each iPhone, configuring it for each user. The firm uses the current iPhone capabilities but adds a digital certificate to create two improved security layers. Initially, the user logs on with a strong password, enforced by the software. The combination authenticates the user to work with the

iPhone and to access Exchange via ActiveSync.

If users want to connect to the firm's Microsoft SharePoint Server to access client documents, for example, they have to go into "settings" and activate the VPN, the rules for which are determined by the added certificate. Users have to enter a second Active Directory password to complete the secure log-in.

Separately, the firm's iPhones run a two-factor authentication software token from RSA Security, which generates a one-time password when a user logs into Exchange with the Safari Web browser via Outlook Web Access, or into virtualized applications hosted on the firm's Citrix servers.

"There are things we can do on the back end with RIM that we can't even come close to with iPhone," Jurczyk says. "But there's enough [with iPhone]: we can kill the device, and apply our security certificate." There are about 200 iPhones deployed.

The German branch of global IT services firm Logica has taken a different approach in rolling out about 1,400 iPhones, all running the 3.0 firmware, strictly for e-mail and PIM access via Outlook Web Access. "With the OWA capability and Exchange, you don't need any additional products to establish a secure connection between the iPhone and the enterprise back-end," says Jan Kokott, head of mobile devices for Logica Germany.

The connection relies on SSL-based authentication, and Exchange administrators can view basic information about the device, the user and activities. They can also remote wipe the iPhones clean of data if they are lost, stolen or jailbroken.

Kokott says Logica considered using a VPN connection but decided that it wasn't necessary. A VPN makes the iPhone a core part of the internal network, he says. That was a level of access and complexity that isn't currently needed. In any case, mobile applications need a completely different design approach. "There is no use in... [just] porting an existing [application] workflow to a mobile device," he says.

The updated ICU has become a powerful tool for creating iPhone configuration profiles that implement a range of security policies, such as enforcing strong passwords, shutting off the camera, blocking access to some content such as disabling the Safari browser or access to iTunes or YouTube. Each device can make use of multiple profiles for different kinds of access, such as one for Exchange but a different one for VPN or Wi-Fi connections.

But ICU won't push these out to the handsets. You have to e-mail them or provide users with a link to a Web site. "It's very manual," Field says. "The fact that there's not over-the-air push deployment under the hood is a non-starter for many enterprises."

But the 3.0 firmware did introduce one over-the-air feature: support for Simple Certificate Enrollment Protocol, which authenticates a device for automatic distribution of digital certificates. ■

How to Go Borderless

Cisco develops the Borderless Network Architecture to ensure enterprises can support the growing demands for user location- and device-independence

Users are clamoring for connectivity.

It doesn't matter where they are, what device they're using, or what applications they want to access, they simply want in—and without worrying about bringing the corporate network to its knees or a lapse of security.

At the same time, users are becoming more multimedia-savvy and social by nature. That portends skyrocketing amounts of video and interactive user content on the corporate network.

Running for the hills might be your reaction to these mounting pressures. Or, you could go borderless.

In fact, going borderless is the only way to handle the challenges effectively, says Marie Hattar, vice president of network systems and security solutions at Cisco Systems.

As Cisco defines it, the borderless network is a platform for enabling customers to connect anyone, anywhere, anyplace and anytime in a seamless, reliable and secure fashion. Toward that end, Hattar says, Cisco is delivering a set of technologies across its core networking portfolios: routing, switching, wireless, security and WAN acceleration.

"The borderless network is realized by a set of user services providing borderless security, mobility and performance," Hattar says. "Complementary network services provide the connections—systems if you will—that enable that user experience. These network functions can be identity-based components, location, energy management or media assurance for video delivery, for example."

BORDERLESS BUT SECURE

As you consider the borderless network concept, think about life without a perimeter delineating the internal from external. You no longer have to worry about where an application resides. Rather, you can deliver applications from anywhere—your data center, the public cloud or a hybrid of the two.

Likewise, users do not have to move through a border checkpoint to gain network entry.

But rest assured, Hattar says, the borderless network is not about getting rid of security policy. "We're not proposing that you eliminate security borders but rather the barriers that borders present. This is about making borders so transparent that you can cross them at any location and not know or be impacted from a business productivity standpoint that borders are there," she explains.

MOBILITY, VIDEO AS DRIVERS

As much as security defines the borderless network and necessitates this transformation, so too do mobility and video, Hattar adds.

"The ability to take mobility and location and then integrate security, no matter where you are and what device you're on, is the hallmark of how the borderless network will deliver seamless application access," she says.

But perhaps the biggest challenge for today's networks is video, which some analysts expect will make up 90 percent of all consumer Internet traffic in three years. That means, organizationally, you need to be able to embrace video today—and the borderless network is tailored for that.

Think of it this way, Hattar says: "The borderless network platform not only will enable video and other next-generation applications from a performance perspective, but also let IT scale those applications across location and device as it ensures reliable, secure experiences."

Knowing that an influx of new application demands will inevitably hit your already-strained network, now is the time to get started architecting for the borderless network. "The only way of addressing that challenge on a permanent basis that will result in better business benefits is to deliver a borderless network," Hattar says.

Read expert blogs, download white papers and watch videos at the Masters of Borderless Networks site on Networkworld.com: www.networkworld.com/community/borderless_networks.

Taming IT mgmt. complexity

IT management newcomers tackle cloud computing, virtualization, advanced apps

BY DENISE DUBIE

IT management start-ups taking advantage of new software delivery models, incorporating innovative computing platforms and attacking sophisticated problems with simpler approaches could help enterprise IT managers embrace emerging technologies such as cloud computing and virtualization without giving up control of their environments.

"Technologies like virtualization and cloud computing are driving the demand for advanced automation and service-level management capabilities because environments using both internal and external computing change the way management software must work," says Andi Mann, research director at Enterprise Management Associates. "Management software needs to be aware of its environment and now it must be able to adapt to manage applications and services in these hybrid on-premise/cloud computing environments."

A flurry of fresh-faced companies has emerged to both ease familiar pain points and address newfound challenges. Several upstarts say they can do it by using the very technologies that are driving the complexity in today's heterogeneous networks: software-as-a-service (SaaS), cloud computing and virtualization.

"There has definitely been a change in delivery models. Now management software is available via quite a wide spectrum," says David Williams, research vice president at Gartner. "Because management requires on-premise data, many service offerings still require a probe or bit of software on the customer site, but the heavy lifting of the management technology can be done by the vendor."

Sophisticated software

For instance, companies such as AccelOps, Aprigo and Vineyard Networks offer their management SaaS, which enables IT managers to reap the benefits of sophisticated management software without investing the time in installation and maintenance of the applications. Service-now.com led the way for management vendors to package their ware as managed services, inspiring both newcomers and veterans such as BMC, CA and HP to embrace the SaaS model.

The fact that IT buyers want management software in more easily digestible formats is no surprise to industry watchers, who say the combination of the economic downturn, growing

complexity of customer environments and the lack of budget dollars and manual labor pushed management technology to its tipping point. Now not only do management software makers have to provide insight into the environment, they must also be able to automate multiple tasks, with little input from human operators.

"Automation has just exploded because IT managers need to improve efficiency and productivity, without adding a lot of staff," says Glenn O'Donnell, senior analyst with Forrester Research. "Virtualization has exploded and torn down the barriers of resistance and trust that used to keep IT from adopting automation."

Newcomers such as AccelOps, Conformity and Elastra plan to cash in on this need for higher IT automation in advanced computing environments using virtual systems and potentially cloud services. AccelOps is able to map IT services down to the

network level and perform root cause analysis without requiring IT staff to recreate incidents or compile sophisticated data. Elastra's Enterprise Cloud Server (ECS) is a platform to automate the allocation of application and related resources existing in private and public cloud computing environments. And Conformity promises to help enterprise IT customers with complex, multi-sourced environments better manage identities and access to various applications. Conformity executives say their cloud application management platform will provide centrally managed visibility and control over SaaS users for compliance and governance purposes.

Management critical

"Management has become so critical to cloud computing because cloud depends on virtualization and the automated provisioning and spinning out of virtual machines. Virtualization management continues to be a healthy segment of the market, and cloud management is one step up from that," says Mary Johnston Turner, research director at IDC.

Considering the complexity IT managers face they also want tools to simplify operations management and really dig into the details of network data.

"IT management customers have been telling vendors 'simplify this, make the purchase process and economic impact simpler' and vendors have responded with virtual appliances or SaaS offerings, which are ways for the vendors to do all the integration and hide the complexity of the technology," O'Donnell says.

That's why companies such as ExtraHop Networks and layerX Technologies are getting attention. Separately, the vendors provide products that help enterprise IT track the performance of business services down to the granular network layers. The ExtraHop Application Delivery Assurance system is software packaged as an appliance that passively autodiscovers servers and devices connected to the network and inspects network traffic. This view into application performance from a network perspective is becoming increasingly valuable to IT managers, analysts say. LayerX, on the other hand, provides an IT search technology called punq, portable utility for network query.

"Punq offers the ability to gather huge amounts of data and try to make sense of it based on a time stamp. It is not an overly sophisticated technology, but if you know what information you need, this type of tool picks up loads of data and helps you make sense of it faster," Williams says.

In search of data

Companies such as Splunk started the IT search trend a few years back, but it is now taking off with IT managers that need a way to gather meaningful data quickly.

"The service desk function and other support groups are always in search of data in real time during their troubleshooting activities. Logs, configurations, traps, alerts, script, codes, metrics and configuration details are all real data that can be extremely useful during the incident and problem management process, writes Evelyn Hubbert, senior analyst at Forrester Research in a recent report. "IT search engines can help gather data from a variety of sources and organize it into information chunks."

And upstart DeskCenter Solutions promises to make client systems management easier by combining 15 applications into one software suite, which manages both physical and virtual servers and desktops. Cisco veterans came together to launch Windmill Networks, which offers its Integration Manager as a VMware virtual appliance. The software correlates, translates and reconciles information collected from multiple third-party management systems to highlight configuration inconsistencies between tools, which could prevent performance problems.

Another start-up launched by management industry veterans, RiverMuse provides advanced event and fault management using an open source business model. With vendors such as GroundWork, Hyperic and Zenoss offering commercial support packages for their open source software, enterprise IT buyers can now adopt the flexible technology without worrying about support. ■



10 IT MANAGEMENT
TECHNOLOGY START-UPS
TO WATCH 2009

North America and Europe deployed more virtual than physical servers in 2008.

95% of data centers are deploying virtualization

88% of North American companies don't have a virtualization security strategy

TECHNOLOGY
Gartner VP Neil MacDonald: Virtualization will be the target of new security threats**

60% OF PRODUCTION VIRTUAL MACHINES ARE LESS SECURE THAN THEIR PHYSICAL COUNTERPARTS.*

THINK CONVENTIONAL SECURITY CAN PROTECT YOUR VIRTUAL ENVIRONMENT?

THINK AGAIN.

Enterprises around the world are relying on virtualization to increase data center efficiency and, unknowingly, leaving themselves more vulnerable. That's because conventional security isn't able to protect virtual machines or see the traffic between them – leaving data and networks exposed. Which is why, according to Gartner Group, in 2009 sixty percent of virtual machines are less secure than their physical counterparts. But with Trend Micro™ Enterprise Security, powered by the Trend Micro™ Smart Protection Network™ infrastructure, you can mitigate the risk and maximize the benefits of virtualization. It's a different kind of security that protects your physical and virtualized environments and helps set the foundation for your company to move confidently into the cloud.

► Learn how to protect your virtualized data center. Download the Trend Micro eBook at trendmicro.com/thinkagain



Securing Your Web World

■ **Novell**, from page 1

products over the next year to support the plan.

"It's somewhat revolutionary," said CEO Ron Hovsepien during an interview with *Network World*. "[In the core trends around virtualization and the cloud] what's bogging down the CIO? Security."

While Novell is taking an aggressive approach, other management vendors such as HP and IBM are also in the mix. For its part, Novell during the first quarter of next year plans to release a tool called Workshop that customers can use to build workloads on Linux and Windows. Offerings following that will include the SUSE Appliance Toolkit for deploying and maintaining Linux-based appliances in physical and virtual environments for update, access and configuration.

Analysts say Novell's initiative is likely to first win adoption among the company's existing customers that are virtualizing their servers and using products such as Novell's Identity Manager. But Novell's approach should catch the eye of non-Novell customers, too, industry watchers say.

"Today, the workload is moving around. You might shift it to New York, for instance, if your main usage is there, and traditional firewalling and identity management aren't enough anymore," says James Staten, principal analyst at Forrester Research. "You want something very lightweight that sets policy and identity in the application."

Novell needs its Intelligent Workload Management effort to pay off in light of falling revenue and growing losses, even as the company's Linux-based products business is on the rise (the company last week posted a fourth fiscal quarter-over-quarter revenue dip of 12% and a



“It's somewhat revolutionary. [In the core trends around virtualization and the cloud] what's bogging down the CIO? Security.”

RON HOVSEPIAN, NOVELL CEO

loss of \$256 million, which swelled in large part due to acquisition and other costs).

The foundation components for security in Novell's Intelligent Workload Management initiative include capabilities available in Identity Manager 4 for real-time provisioning, reporting and management as well as the already announced Cloud Security Service, also expected to debut in 2010.

Novell today offers management products under the brands PlateSpin Workload Management and Business Management, but the company will introduce products that integrate and extend management capabilities to the cloud.

These will include PlateSpin "Atlantic," a self-service provisioning portal, PlateSpin "Bluestar" for physical server change and configuration management and monitoring, and ZENworks "Workbench," a master repository and change/control system for on-demand deployment of workloads.

Other Novell products, including Business Service Manager, Business Experience Manager, myCMDB and Sentinel Log Manager, will also be tailored for service-level reporting of workloads across physical, virtual and cloud environments. Another product is expected to be Compliance Automation to integrate Sentinel security information and event-monitoring with Business Service Manager for monitoring events.

While there are a lot of unknowns about how exactly the effort will play out, Forrester's Staten says Novell is bringing a strong argument to the table about managing workloads in a virtualized environment. He notes this has been a weighty topic for other vendors, including HP with its Orchestrator, though it's not oriented toward heterogeneous virtualization.

Mary Johnston Turner, research director at IDC, says Novell is addressing a new set of requirements. "As we move into dynamic virtualization, you need to integrate and have a more policy-based approach," she says.

However, Turner notes that this approach presents challenges in that organizations have an installed base of management tools and are not set up to run the way that Novell envisions. There is also the practical matter of seeing how well Novell delivers on its promises, though she gives the vendor "credit for being early to the game."

Laura DiDio, principal analyst at Information Technology Intelligence, points out there's a real need for a heterogeneous approach to container virtualization because companies often do use more than one type of server virtualization. In a recent survey of about 1,000 organizations, DiDio said almost 40% used multiple types of server virtualization. "They get VMware, Microsoft, Citrix, and a real surprise, Parallels for the Mac," she says. ■



RISK AND REWARD BY ANDREAS ANTONOPOULOS

Security review: Good riddance to 2009

LOOKING BACK AT 2009, I'm sure I will not be alone in celebrating the end of the year with gusto. 2009 was a difficult year for most, with a slow recovery and challenging business conditions. Let's see how I did predicting security trends in 2009:

Host-based security. I predicted that host-based security would rise in importance with the release of Windows 7. It is still too early to tell if Windows 7 will shift the discussion in security, but so far this prediction has not come true. Perhaps it represented wishful thinking.

Mobile security concerns and solutions grow. I predicted the emergence of a Trojan on a mobile platform and the increased importance of security for mobiles. The iPhone worm and other security incidents validate this prediction.

Encryption grows. At-rest encryption did in fact grow, coming as standard in most desktop operating systems and being widely adopted by companies as a default policy. E-mail encryption is still a challenge, according to last year's prediction. I'll count this one as a successful prediction.

No news is bad news. While no new major malware outbreaks made huge headlines, the silent spread of stealthy keyloggers, Trojans and botnets continued. As predicted, more computers fell prey to these silent threats while the lack of headlines is broadly and incorrectly seen as "success" against malware.

New botnets are discovered and they're bigger than ever. Fortunately, my prediction was correct but incomplete. Not only were several major botnets discovered in 2009, but a few of them were dismantled with security firm and law enforcement action, leading to measurable (though temporary) decreases in spam.

Regulatory compliance is back with a vengeance. I thought by now we would have a couple of mega-regulations to complement the Sarbanes-Oxley Act. Other than the strengthening of the Health Insurance Portability and Accountability Act under the stimulus and Electronic Health Record initiatives, regulatory compliance did not explode. However, this prediction is only off by a matter of months. It will be carried into 2010, with a high likelihood because many regulatory schemes are moving through committees in both the House and the Senate.

Security projects struggle for funding. IT professionals told us throughout 2009 that projects needed demonstrable ROI to get funding. The only exceptions were projects driven by compliance, as predicted.

I think I can count 5 out of 7 as correctly predicted, so onwards to 2010. It can't arrive soon enough. ■

Antonopoulos is senior vice president and founding partner at Nemertes Research, an independent technology research firm. He can be reached at andreas@nemertes.com.

9 MILLION CUSTOMERS HAVE VOTED.

THANKS

FOR MAKING US THE WORLD'S #1 WEB HOST!

Your loyalty has helped make us the leading web hosting provider worldwide. 1&1 was built on a foundation of innovative products and outstanding reliability, and we continue to strive to bring you high-quality products at affordable prices. To show our appreciation, we're offering discounts on our most popular products.

DOMAINS

	1&1	Yahoo!	Go Daddy
.com	\$8.99	\$9.95	\$10.69
Private Domain Registration	FREE	\$9.00	\$8.99
ICANN Fee	Included	Included	\$0.18
E-mail Account	FREE 2 GB Mailbox	NO Mailbox Included	FREE 1 GB Mailbox
Total Annual Cost	~~\$8.99~~	\$18.95	\$19.86

\$6.99
first year*

BUSINESS WEBSITES

Powerful website solutions for your small business.

- 1&1® Business Package
- 3 FREE Domain Names
 - 250 GB Web Space
 - **UNLIMITED** Traffic

~~\$9.99~~
per month

3 months FREE!*



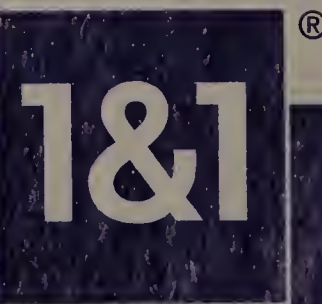
HURRY, SPECIAL OFFERS END 12/31/2009!

More special offers are available online, visit www.1and1.com

*Offers valid through December 31, 2009. "3 Months Free" offer valid with a 12 month minimum contract term only. Setup fee and other terms and conditions may apply. Visit www.1and1.com for full promotional offer details. Program and pricing specifications and availability subject to change without notice. 1&1 and the 1&1 logo are trademarks of 1&1 Internet AG, all other trademarks are the property of their respective owners. © 2009 1&1 Internet, Inc. All rights reserved.



Call **1-877-GO-1AND1**
Visit us now **www.1and1.com**



DEMO  people's
choice

DEMO DRIVES INNOVATION

 **Consumer Winner:**



Emo Labs
Listen more™

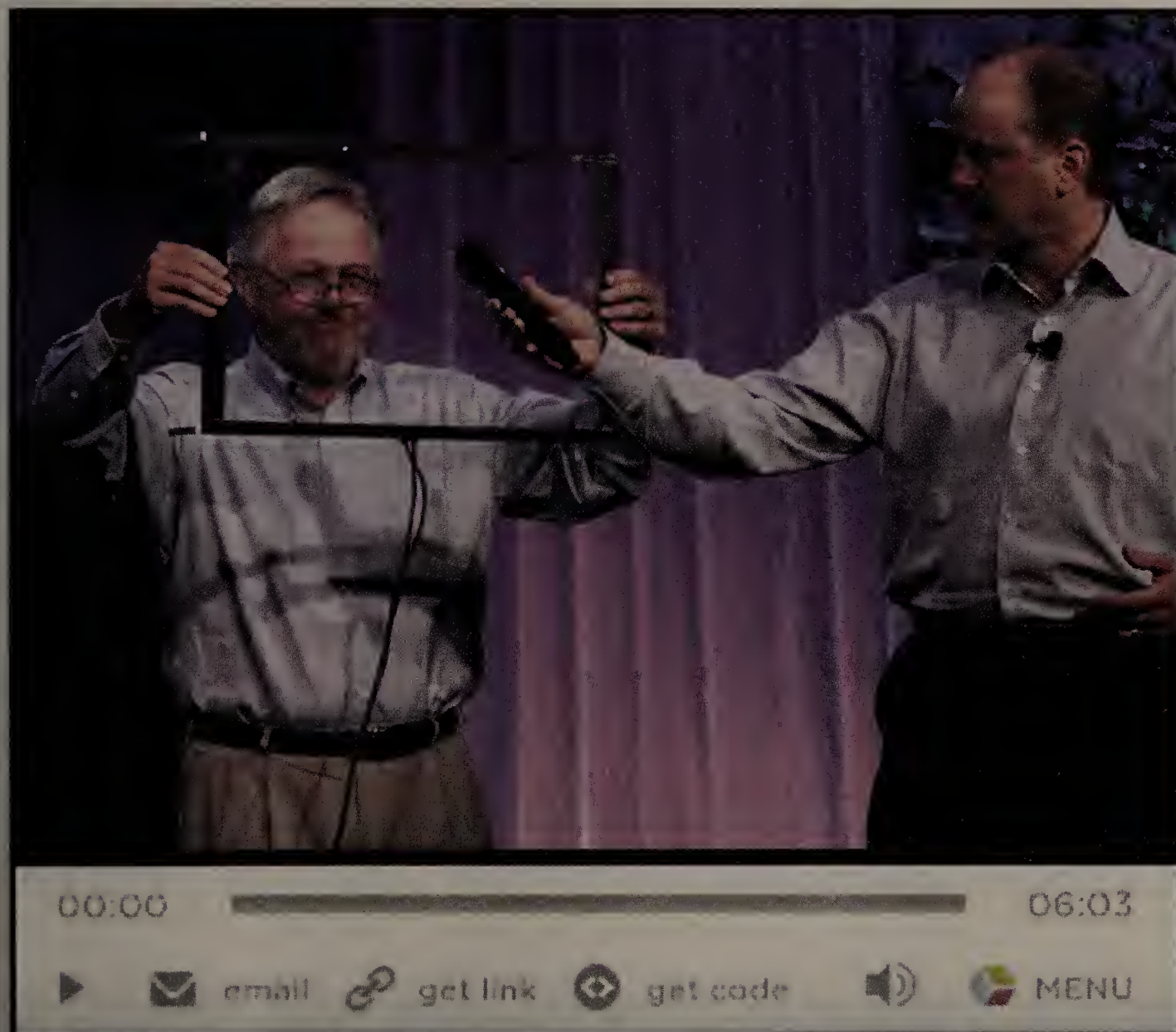
EMO Labs, Inc. has changed the way you experience multimedia content with invisible, zero-footprint speaker systems. Imagine a TV with great stereo sound coming directly from the display panel, unifying audio and video for a more natural, realistic and compelling presentation.

DEMO  people's
choice

70 companies launched and pitched their products at the most recent DEMOfall 09 conference. The DEMO attendee audience of venture capitalists, corporate business development officers and press evaluated all demonstrator launches and the overall value proposition of each company to determine the DEMO People's Choice Award winners.



Watch their Award-Winning Product Launch at:
www.demo.com/demopcwinners



What DEMO Says About Emo Labs:

As flat panel televisions get thinner, so does the audio they deliver. The physical dimensions of the display simply don't provide the space to integrate a great sound system. Emo Labs rethinks the integrated speaker in a dramatically and new approach that delivers rich, high-fidelity sound to match high-definition video. It's brilliant engineering and, after you hear it, you'll not want anything less in your high-def TV.

DEMOspring2010
The Launchpad for Emerging Technology

REGISTER NOW

DEMO continues to deliver the best innovation at DEMOspring 2010.
For complete information and to register, go to **www.demo.com**

Reducing data center energy use

BY LARS STRONG

Research from the Uptime Institute reveals that 60% of the available cooling in a typical computer room is wasted due to airflow losses.

But the good news is that optimizing your airflow represents the greatest opportunity for reducing operating costs and deferring capital costs. That will also let you increase server density without adding cooling infrastructure.

To optimize your computer room infrastructure, consider the following steps:

1. Get a computer room cooling efficiency health check.

There are a range of diagnostic assessments available, and most will identify energy inefficiencies and offer a targeted remediation strategy. If followed, the plan could save you operating costs immediately.

At the very least, a cooling health check should examine: IT equipment air-intake hotspots; percentage of airflow loss; and cooling capacity factor (CCF), or the margin of installed cooling capacity vs. load. To do this, the engineer will:

- Count and measure raised floor openings.
- Measure cabinet air-intake temperatures.
- Measure relative humidity of hotspots.
- Sum cooling unit capacity.
- Sum cooling unit airflow.
- Sum computing equipment power load.
- Determine the presence of latent cooling and its associated latent cooling penalty.
- Check all return air temperature and relative humidity sensors for calibration.

These assessments will result in a remediation plan that will, among other things, likely advise sealing all cable and IT equipment cabinet openings to properly channel airflow.

Case in point: A company with a 6,996 square foot data center did a cooling efficiency health check by measuring airflow loss and hotspots (cabinet intake-air temperatures that exceed maximums), and collecting data to calculate the CCF and make comparisons to the critical load.

By implementing the remediation strategy, the hotspots were eliminated and there was a 60% improvement in airflow loss, which meant the reliability of the equipment would improve. In addition, the company was able to put two cooling units into inactive standby mode, reducing electrical consumption by \$27,024 per year (\$2,252 per month based on \$0.08/kWhr). Simple payback occurred between the second and third months.

2. Seal the computer room envelope and the raised floor.

Depending on what a health check of your

data center reveals, remediation will probably involve sealing up the following areas:

■ Openings in the perimeter walls, in particular, cable trays and conduits passing through the perimeter walls. Also inspect the area around columns to make sure conditioned air is not escaping through column facades to adjacent floors and wall openings where cables pass through and holes in the perimeter walls above the dropped ceiling.

■ Openings in the raised floor that do not deliver conditioned airflow directly to the face, or intakes, of IT equipment. The most common openings that require sealing are cable openings under or behind cabinets.

Case in point: In a financial impact study of a 10,000 square foot data center that had 400 special grommets installed to keep cold air in, simple OpEx payback occurred within the first two months and there were annual OpEx energy savings of \$50,896. The capacity improvements made it possible to turn off 18% of computer room air conditioning units (CRAC).

3. Improve the above-the-floor airflow management.

Depending on the conditions of your data center, remediation measures may include installation of internal blanking panels; vertical end row panels; horizontal partitions over rows and; cold and hot aisle containment.

Installing blanking panels in unused rack unit openings prevent rear-to-front circulation of hot exhaust air from the servers. As equipment load densities continue to increase, hot air circulation into the cold aisle through open spaces in cabinets, as well as around the ends of rack rows and across the top of racks, becomes more significant. Installing blanking panels helps ensure the computer equipment air-intake temperature, especially at the top of racks, is below the American Society of Heating, Refrigerating and Air-Conditioning Engineers' recommended maximum of 80.6°F.

Case in point: Two financial impact case studies, one for a high-density facility and one for a lower-density facility, were performed to demonstrate how installing the blanking panels yield cost savings by allowing data center managers to raise computer room temperatures to take advantage of the increased cooling unit capacities that result from higher return air temperatures.

For the high-density facility (400 cabinets in a room with 10,000 square feet of raised floor), the total annual cost savings was \$137,395 and payback occurred in the second month. Because 29.5% of the CRAC units were placed on inactive standby, there was a 29% reduction in annual operating and maintenance costs.

In the lower-density facility, with 12 water-cooled CRAC units and 7.5 hp fan motors, the total annual cost savings was \$30,594 and payback occurred in the fourth month. This represents a 15% reduction in the annual operating and maintenance costs of the cooling units.

4. Tune the computer room

After installing the recommended sealing technology, it's critical to re-examine the heat load and all cooling unit settings to ensure you have taken advantage of all the efficiencies afforded by sealing openings.

You should also have an engineer physically open equipment and make detailed performance measurements. The engineer should:

- Determine the heat load by adding together all of the PDU or Remote Power Panel outputs or by summing the UPS system(s) outputs.
- Evaluate the configuration of the cooling units on the raised floor by checking temperature and relative humidity set points and sensitivities.
- Check the calibration of the return-air sensors.
- Check each cooling unit to verify if it is delivering its rated cooling capacity. Both airflow volume and temperature drop need to be measured to determine the delivered cooling capacity.
- Determine the required number of operational cooling units from the heat load data and the cooling capacity information. There should be redundant cooling capacity in every area of the room.
- Determine the proper number and placement of perforated tiles. Their arrangement must be adjusted within the cold aisle based on careful monitoring of IT equipment air-intake temperatures.
- Use an infrared camera to identify airflow circulation patterns and equipment performance issues and the options for improvement.

Driving energy consumption down means costs go down. Expert computer room remediation strategies provide near-instant energy savings which make it possible to increase server density without adding cooling infrastructure. The money and time spent will pay you back in significant energy savings. ■

Strong is professional engineer and senior consultant with Upsite Technologies.

This vendor-written tech primer has been edited by *Network World* to eliminate product promotion, but readers should note it will likely favor the submitter's approach.



iPhone.[®]
The device they want.
The control you need.



Protect. Connect. Collaborate.

The iPhone has redefined the mobile landscape for business, but until now, control and management issues have made it challenging for IT to protect the enterprise. With Good for Enterprise, everyone at your company can finally connect and collaborate securely on the mobile device they want, and you have the control you need. Say yes to iPhone for your enterprise. Visit us online at www.goodmfp.com or call 1-866-7-BE-GOOD.



GEARHEAD BY MARK GIBBS

Pogoplug: A wolf in sheep's clothing

SOME THINGS ARE not what they appear to be. They look innocent, devoid of power or danger, and then when you least expect it, pow! They show themselves to be much more. Such is the nature of this week's find: The Pogoplug produced by Cloud Engines.

At first glance the second generation of the Pogoplug appears to be unassuming. It is a relatively small silver rectangle (4 by 2.5 by 2 inches) on a hideous shocking-pink stand. On the back there's a power connection, a GigE connector and three USB 2.0 ports, while the front sports another USB connector and a power-on light.

That's it. But beneath this garish but otherwise unremarkable exterior beats the heart of one of the coolest and, to the enterprise world, one of the more dangerous gadgets to appear for some time.

Hidden inside the Pogoplug is a 1.2GHz Marvell ARM SOC RISC processor and 256MB of RAM and 512MB of internal flash storage. On this neat little package runs a stripped-down Linux distro with the 2.6.22.18 kernel.

You power up Pogoplug, plug in an Ethernet cable, connect a nerd stick or a USB HDD drive (USB or externally-powered) and then browse to my.pogoplug.com where you create an account by giving your e-mail address and selecting a password.

Minutes later you receive an e-mail with a link that contains the unique 26-digit code for your Pogoplug. Click on that link and you are taken to a Web page that displays the contents of the drive attached to your Pogoplug. Voila! Almost instant network-attached storage, but accessible from anywhere on the intertubes! There are also applications for Windows and OS X that allow you to map local drives to the Pogoplug storage.

So, how does this magic work? Well, by making three assumptions.

First, that your network will assign an address by DHCP. Next, that a UDP connection can be created from your Pogoplug to Port 4365 on service.pogoplug.com. And lastly, that your firewall will allow incoming UDP connections from that same service. If DHCP isn't available, Cloud Engine's tech support can help you set up a static address.

The Pogoplug Web interface lets you browse the attached storage and, if you click on an image, it will be displayed, while clicking on a music file will play it. From the Web interface you can enable sharing with other people and notify them via e-mail, post links to your content on Twitter, Facebook and MySpace, publish an RSS feed linking to your content, enable public Web access and set up e-mail notification of folder changes.

You can use SSH to establish a console session on the Pogoplug and then install lots of interesting open source software. The OpenPogo site provides all you need to know about adding a Web server, PHP, MySQL, PHP-MyAdmin, Samba, a Secure FTP server, a BitTorrent client, Django, Ruby on Rails with RubyGems, Cron... a cornucopia of open source coolness.

And here's the big thing: You get all of this for just \$129!

Now, just imagine a group of users on your network. You haven't given them the shared storage or the group application they want so what do they do...? You get the picture? Instant security problem? Instant data management problem? Instant compliance and governance problems? Yep, the Pogoplug is not the innocent device you might have thought it to be.

I love the Pogoplug. Low power consumption (5W), no noise, open architecture, highly flexible, low cost... I award Pogoplug a rating of 5 out of 5. Outstanding! ■

Gibbs is also not innocent in Ventura, Calif. Connect to gearhead@gibbs.com.



COOLTOOLS BY KEITH SHAW

It's an app world after all

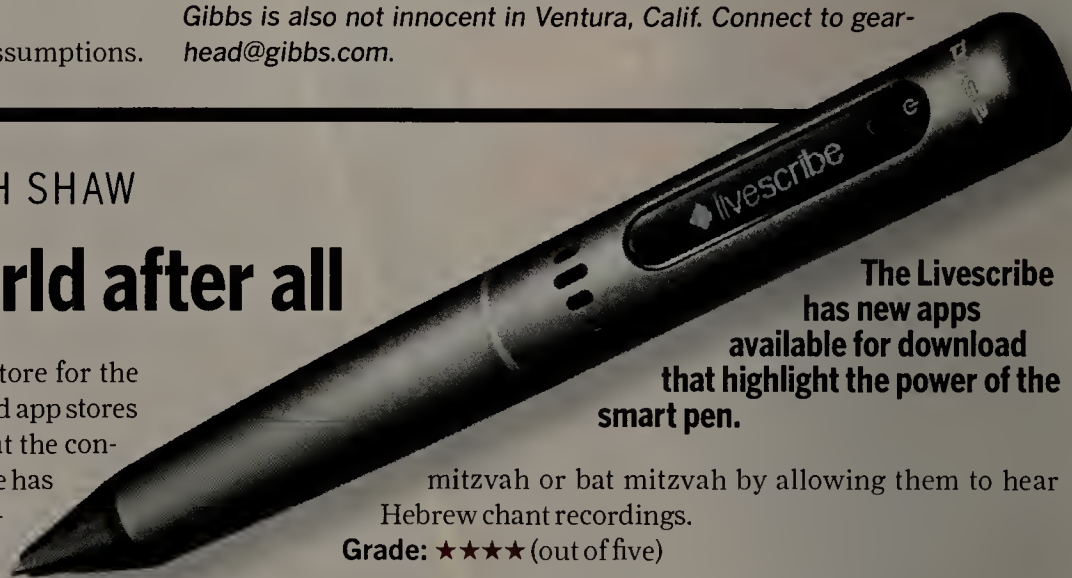
THE SUCCESS OF Apple's App Store for the iPhone and iPod touch has generated app stores from other smartphone makers, but the concept of downloadable applications that can be put onto a device has spread to other products. For example, Logitech's Squeeze-box Radio lets users download additional "apps" that connect them to streaming media services such as Pandora and Slacker. Here are two more devices that recently announced some additional app downloads, expanding the value of the original device and allowing for flexibility in future features.

The scoop: Pulse smart pen, by Livescribe, about \$200 (4GB model).

What it is: The original Pulse smart pen debuted last year from Livescribe, and has been popular with students who use the pen to take notes on special paper and record the audio, and then have them available for review later through synchronization with a computer. The latest pen includes 4GB of memory, which captures about 400 hours of audio. Like the earlier pen, the Pulse includes an infrared camera that captures writing on the special dot paper, a microphone and speaker, and an OLED screen.

Why it's cool: The new apps available for download through the Livescribe Web site let users experience more applications that highlight the power of the smart pen. For example, the video poker app has you draw the "deal" and "bet" areas on the paper, along with five circles for holding cards. The game occurs on the pen's display, and you choose your actions by tapping on the boxes you drew. The Spanish Dictionary app lets you write out English words and have them translated into Spanish (and vice-versa), and also lets you hear the word pronounced via audio.

Apps range in price from free up to about \$3, although there is one \$100 app (MagicYad) that helps Jewish boys and girls prepare for their bar



The Livescribe has new apps available for download that highlight the power of the smart pen.

mitzvah or bat mitzvah by allowing them to hear Hebrew chant recordings.

Grade: ★★★★★ (out of five)

The scoop: Roku players, starting at \$80 (up to \$130).

What it is: The Roku series of digital media players attach to a TV and connect either wirelessly or with an Ethernet cable to your home network in order to access digital media content from the Internet. The original Roku box was a Netflix player, letting you view movies from Netflix's Instant Streaming area and watch the content on a TV. Roku has added the ability to view Amazon's On Demand Service and MLB.com content to the box. The recent updates let users pick from additional media streaming services, most notably Pandora's music service and Flickr photos. Other services with apps include Motionbox, Mediafly, blip.tv and Revision3.

Why it's cool: Having additional media services available for streaming to the TV via the Roku box increases the value of the box, especially if the owner doesn't have a Netflix, Amazon or MLB.com account. Some of the "free" services need some improvement in their interfaces, but seeing additional content on the box, plus the potential of seeing more content soon (maybe Hulu someday?) make this a cool device to have on the home network.

Grade: ★★★★★

Shaw can be reached at kshaw@nww.com. Follow him on Twitter at <http://twitter.com/shawkeith>.

NETWORKWORLD® ANNOUNCES

IT Roadmap

CONFERENCE & EXPO

**ALERT YOUR COLLEAGUES
IN OTHER CITIES!**

IT ROADMAP 2010

Los Angeles, February 8 • Chicago, March 16

Denver, April 6 • Boston, May 25

Atlanta, June 8 • Philadelphia, July 14

Dallas, September 14 • Washington, DC, October 19

San Francisco, November 3

The **ONE DAY** event
that **comes to you!**

COMING NEXT TO **New York City**

SAVE THE DATE: **WEDNESDAY, JANUARY 27TH**
MARRIOTT MARQUIS, 1535 BROADWAY, NEW YORK CITY

SIGN UP – AND BRING YOUR COLLEAGUE! Full details at www.networkworld.com/goNYC

Five all-new morning sessions:

- **Virtualization & Cloud Roadmap—**
Desktop Virtualization, Software-as-a-Service, Cloud Computing
- **Data Center Roadmap—**
Green IT, Disaster Recovery, and Floor Planning for Flexibility
- **Optimization & Management Roadmap —**
Application Performance, WAN Optimization, and Network Management
- **Convergence & Wireless Roadmap—**
Unified Communication, Collaboration, and Enterprise Mobility
- **Security Roadmap—**
Identity Management, Compliance & Regulation



Plus an afternoon of unique problem solving breakouts:

- **“Help Me Build My Business Case” Workshops—**
The business strategies you need to drive technology up the ladder. Choose from building an RFP, cost modeling, budgeting, how to calculate ROI, more
- **Problem-Solving Tech Tutorials—**
Meet the most pressing challenges in enterprise IT in an informal, participatory white-board setting
- **New Technology Demos—**
Close up and hands-on: the latest betas and enterprise-ready releases presented by top solutions providers
- **Strategy-in-Action Case Studies—**
The best practices and front-line advice from experienced end users ready to fast track you past pitfalls of managing enterprise-sized technology
- **Live Expo Floor Solution Clinics—**
Technical professionals from the vendors you most want to see will conduct private and personalized, one-to-one consults right on the expo floor

To learn about sponsorship opportunities and benefits call or email Andrea D'Amato, Vice President, Publisher, Network World at 508-766-5455 or adamato@nww.com

Pre-Qualify and Attend Free!
Visit www.networkworld.com/goNYC

McAfee wins Web security shootout

All five products tested deliver online protection against zero-day threats

BY BARRY NANCE, NETWORK WORLD LAB ALLIANCE

Two distinct and important security trends emerged in our testing of antimalware gateways. First, the current crop of products are migrating from the classic approach of referencing a local (customer premises) database of malware signatures and instead using a “just-in-time” approach of querying a central (vendor site) database in order to deal with new malware instances.

Also, vendors strongly recommend inserting a gateway device inline, between the Internet and the local network, rather than connecting it to a span/tap port.

The need for greater security is behind both these trends. Vendors told us even frequent updates of a local customer-site database of malware signatures, URLs and IP addresses can’t always keep up with the rapid spread of new malware instances. (In the future, companies may need to plan for extra speed in their Internet links to accommodate a growing number of cloud-based queries of vendor malware databases.)

Next, deep and thorough inspection of network traffic has become the only effective way to keep malware off the network. An approach that simply monitors for malware and reports the results to administrators, who then manually clean up the mess, is cumbersome and nearly unworkable.

Similarly, an approach that uses zero-latency “TCP RESET” commands to cancel malware traffic leaves open a small window of risk (see <http://tinyurl.com/ygto9wd>).

Today, malware takes many different forms — malicious Web sites, hijacked advertising banners on otherwise innocent-looking sites, phishing, spyware, spam, viruses, Trojans, botnets, rootkits, instant messaging malware, peer-to-peer (P2P) file sharing malware, Skype malware, social networking malware, hijacked Facebook applications, gaming malware and Web 2.0 application malware.

The list is long, and these Internet-borne threats cannot be ignored.

Web attacks are one of the most dangerous and sophisticated vectors used by cyber criminals. Attacks can come from malicious Web pages, redirects, hijacked legitimate sites, phishing e-mails and social networks.

For example, you may think you’re safe because your users visit only “good” Web sites. Unfortunately, because cyber criminals quite often hijack advertising banners, even this reason for avoiding putting an effective security barrier between you and the Internet is no longer valid.

Without protection you could find that criminals have sucked corporate and personal information quickly and silently out of your computers. Moreover, the advent of extremely sophisticated rootkits has made spyware a stubborn, intractable problem. Removing the latest spyware threats “by hand” is, to say the least, problematic.

The quest for perfection

The ideal antimalware gateway identifies and thwarts virtually all malware. It performs with alacrity (such as low latency), thus giving users a responsive Internet experience — as if the device weren’t even present.

NETRESULTS

Product	Web Gateway V6.8.6 model WW 1900E	Interscan Web Security Virtual Appliance 5.0 Interscan Messaging Security Virtual Appliance 7.0	Unified Security Gateway V3.0	Web Security Gateway V10000	Web Gateway 4.5 model 8450 Mail Security V7.5 model 8300
Vendor	McAfee www.mcafee.com	Trend Micro www.trendmicro.com	FaceTime www.facetime.com	Websense www.websense.com	Symantec www.symantec.com
Price	Starts at \$25,000 plus appliance cost for 1,000 users.	\$14,290 first year license for 500 users.	\$9,200 per year for 100 users.	\$16,000 plus \$42/user/year.	Web Gateway: \$3,495 plus \$27.84/user/ year for 1,000 users; Mail Security: \$1,995 plus \$18.89/user/ year for 1,000 users.
Pros	Accurate; fast; easy to use.	Excellent reports; easy installation; good overall view of corporate security.	Especially good security for social networking.	Good performance; easy to use.	Excellent documentation; highly useful compliance summary screen.
Cons	Updates took longer than expected.	Performance was slower than most other products; user interface not as intuitive.	User interface not as responsive as McAfee’s.	Pricey; not as effective against phishing.	The two products need to be better integrated and have lower latencies.
Score	4.5	4.1	3.9	3.85	3.6

SCORECARD

Product		McAfee Web Gateway V6.8.6 model WW 1900E	Trend Micro Interscan Web Security/ Messaging Security	Facetime Unified Security Gateway	Websense Web Security Gateway	Symantec Web Gateway/ Mail Security
Action	Weight					
Malware blocking	35%	5	4.5	4.5	4	4
Performance	15%	5	3	4	4	3
Ease of use	15%	4	4	4	4	3
Additional features	15%	4	4	3	3	3
Reports	10%	4	5	3	4	3
Documentation	10%	4	4	4	4	5
Total score		4.5	4.1	3.9	3.85	3.6

SCORING KEY: 5: EXCEPTIONAL; 4: VERY GOOD; 3: AVERAGE; 2: BELOW AVERAGE; 1: SUBPAR OR NOT AVAILABLE

It prevents malware from “phoning home” (sending credit card or other sensitive data back to the cyber attacker). The perfect product helps remove malware from infected endpoint computers. It produces useful reports and timely alerts. It’s robust and reliable, scales well and is easy to use and deploy.

Five vendors answered our call to submit products to our lab for evaluation. We received antimalware gateway devices from McAfee (WW 1900E Web Gateway V6.8.6 appliance), FaceTime (Unified Security Gateway V3.0 appliance), Symantec (8450 Web Gateway 4.5 appliance and 8300 Mail Security V7.5 appliance) and Websense (Web Security Gateway V10000 appliance).

Trend Micro sent software that runs on servers that you provide — Interscan Web Security Virtual Appliance 5.0 and Interscan Messaging Security Virtual Appliance 7.0, plus a central console reporting module (Advanced Reporting and Management 1.0).

McAfee’s Web Gateway appliance wins the Clear Choice award, but the race was a tight one. McAfee’s appliance thwarted more malware — with lower latency — than the other gateways. The other products, however, also did a credible job of keeping malware off our network.

Blocking malware

It’s clear that the most important criterion for an antimalware gateway is its success rate at blocking malware. McAfee Web Gateway fared best in our tests, turning aside 99% of the malware instances we threw at it.

We attacked each vendor’s product with 100 spyware, adware, Trojan and rootkit downloads. These malware instances included older classics such as CashBackBuddy, Casino Dialer, SearchEssistant, Searchforit, SearchMiracle.EliteBar and SearchSquire, as well as freshly minted malware such as Generic Downloader.x!brz, Generic Rootkit.dt.dr, W32/Akbot.gen.a, Bredolab.gen.h, FakeAlert-MaCatte, Whitewell, Opachki.a, Ransom-N and PWS-CuteMoon.

Tied for second with a 96% success rate are the FaceTime Unified Security Gateway and the two Trend Micro products. Symantec Web Gateway and Mail Security and the Websense Web Security Gateway V10000 managed to block 94%.

Phish phase

When we tested how well the products thwarted phishing attempts, McAfee’s Web Gateway fared best, recognizing and foiling 90% of the scams.

We fed each gateway a diet of 500 selected phish accompanied by another 500 non-phish messages.

We composed several of the phishing messages ourselves, embellishing the text and obfuscating both the syntax and spelling in order to sneak our phish around the net. Accurate recognition of good vs. bad was our criterion.

The Trend Micro Interscan Web Security Virtual Appliance and Interscan Messaging Security Virtual Appliance recognized 84% of the phishing attempts, the Symantec Web Gateway and Mail Security identified 76% and the Websense Web Security Gateway V10000 achieved 73%.

The FaceTime appliance we tested was not able to scan for phishes. However, the vendor announced recently that the latest version of its Unified Security Gateway will be able to scan for phishing attempts when the product is used in conjunction with a Blue Coat proxy device, and eventually ISA and Squid proxies as well.

Low latency leaders

The McAfee Web Gateway exhibited the lowest latency — 28 ms — when we downloaded executable files through these antimalware gateways. The Facetime Unified Security Gateway gave us 34 ms latency, the Websense Web Security Gateway V10000’s latency was 36 ms and the Trend Micro Interscan Web Security Virtual Appliance and Interscan Messaging Security Virtual Appliance achieved 48 ms latency. The Symantec Web Gateway and Mail Security devices trailed the other gateways with a latency of 62 ms.

Moving into the cloud

We looked at the extent to which these products access a central vendor Internet site with malware queries (or plan to in the future).

Symantec’s Mail Security appliance uses both a local (onboard) malware database and queries to a cloud database maintained at Symantec. Its Web Gateway uses a local malware database.

Trend Micro’s approach is a hybrid of local (onboard) scanning and, for executables not found in the local database, queries to a cloud database at Trend Micro’s central site.

McAfee proactively uses “spider” programs that traverse the Web to examine Web pages’ active (such as executable) content for bad behavior, and McAfee additionally relies on TrustedSource’s Web reputation technologies to distribute malware database updates to its customers.

CLEAR CHOICE TEST

ANTIMALWARE GATEWAYS

Websense uses a multi-phased approach that consists of a local (onboard) database and, if a downloaded executable program isn't in the local database, a Real Time Security Scanning engine that goes beyond signatures to statistically profile executables for malicious intent.

FaceTime's appliance contains a malware database updated by both Facetime and Sophos, from which Facetime licenses its database. Facetime indicated that it is migrating toward a hybrid approach combining queries of a local malware database and a cloud database.

These vendors update their products' local (onboard) malware databases hourly or, when a significant threat surfaces, on demand.

Coincidentally, the McAfee, Facetime and Websense appliances we tested were all Dell PowerEdge 1950 computers. The Symantec Mail Security device was also a Dell PowerEdge 1950, while the Symantec Web Gateway was a Dell R200 computer. All were 1-U rack-mountable.

For parity's sake, we installed Trend Micro's software also on Dell PowerEdge 1950s. So for performance-measuring purposes, all the products except for the Symantec Web Gateway 8450 ran on essentially the same hardware.

Ease of use

McAfee's Web Gateway (formerly Secure Computing's Webwasher) sports an easy-to-use, intuitive browser-based interface that's especially responsive. Reports are quick and informative, and the Web Gateway dashboard is completely customizable.

The McAfee Web Gateway installation was the slickest. A USB memory stick containing a configuration program accompanies the device. Insert the memory stick in a Windows machine, run the program, save your configuration, move the memory stick to the Web Gateway before boot time and — voila! — the Web Gateway uses the IP address and other configuration data you've specified.

Websense's Web Security Gateway has a browser-based interface that provides administrators with fingertip control over how more than 130 protocols (such as IM and P2P) affect applications on the network. It comes with more than 55 useful reports, and the user interface displays a thoughtfully designed dashboard.

Trend Micro gave us consolidated threat reporting and corporate policy management across our network. We easily varied security policies by network segment, company division and company department. We particularly liked Trend Micro's unified view of network security across an

entire enterprise.

You install Trend Micro's software on your computers, thus giving you fine control over the speed and capacity of your gateway. Installation is a snap.

The Symantec Web Gateway (acquired from MI5) and Mail Security (from Bright-Mail) devices have somewhat disparate user interfaces. Both are browser-based. Web Gateway has a useful executive summary report screen that tells the security threats and activity levels the Web Gateway is experiencing. Symantec Web Gateway additionally produces about a dozen reports on malware activity. These show, for example, infections classified by spyware name, potential attacks, client application usage and sorted lists of your network's Web destinations.

Symantec Mail Security's browser-based interface features an intuitive dashboard, an executive summary (quite different from the Web Gateway's summary), reports for monitoring e-mail activity and spam levels and even a compliance summary that highlights potential violations of corporate policies regarding message content.

The Symantec Web Gateway installs via a browser-based wizard, but the Symantec Mail Security appliance installation needs to have a one-time monitor and keyboard connected for initial setup.

The Facetime Unified Security Gateway appliance has a Web-based user interface for setting configuration options, seeing real-time status and viewing reports. The Unified Security Gateway appliance interface is intuitive to use and navigate. The USG status screens and reports are comprehensive and highly informative.

Installing the Websense Web Security Gateway V10000 or the Facetime Unified Security Gateway consists of cabling the box to your network, powering up and assigning an IP address via a one-time monitor and keyboard connection.

All these products' manuals were clear, comprehensive and easy to follow. All were online, with Symantec also providing hard-copy booklets and manuals.

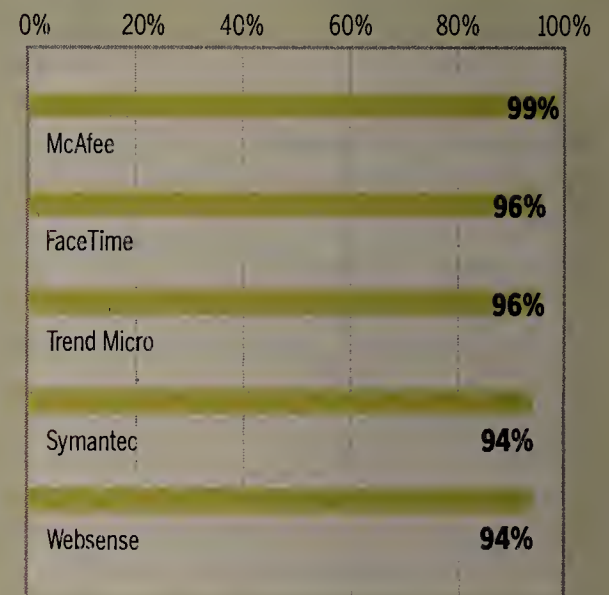
Conclusion

McAfee's Web Gateway appliance is our Clear Choice winner. It does an excellent job of keeping malware (both Web site-based and e-mail-borne) at bay, is responsive, has an intuitive, customizable user interface and scales well. The other four products weren't far behind and all offer effective protection against Web-based attacks. ■

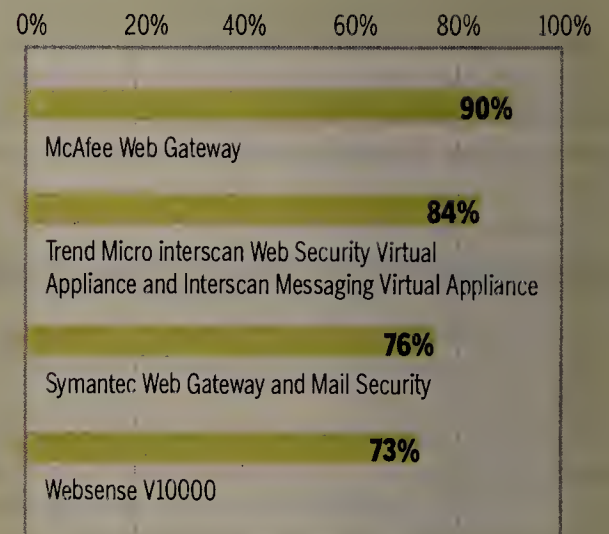
Nance runs Network Testing Labs and is the author of Introduction to Networking, 4th Edition and Network Programming in C. His e-mail address is barryn@erols.

Malware blocking success rate

How well the products blocked 100 malware attacks

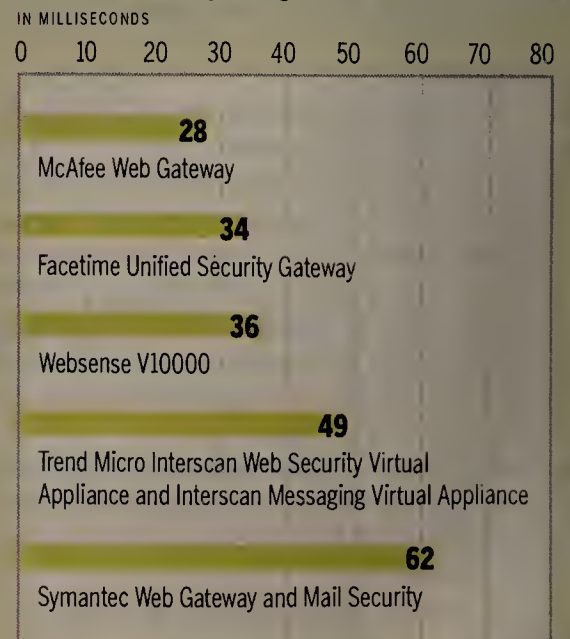


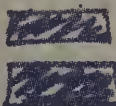
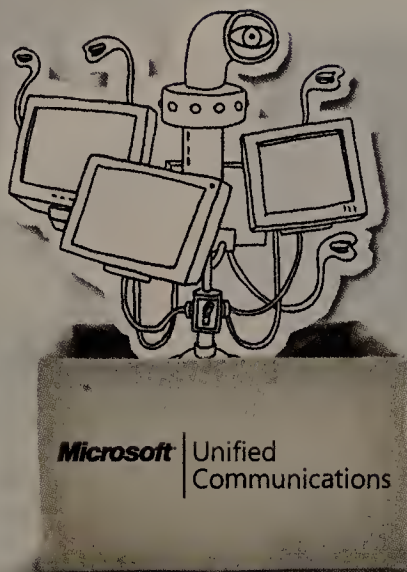
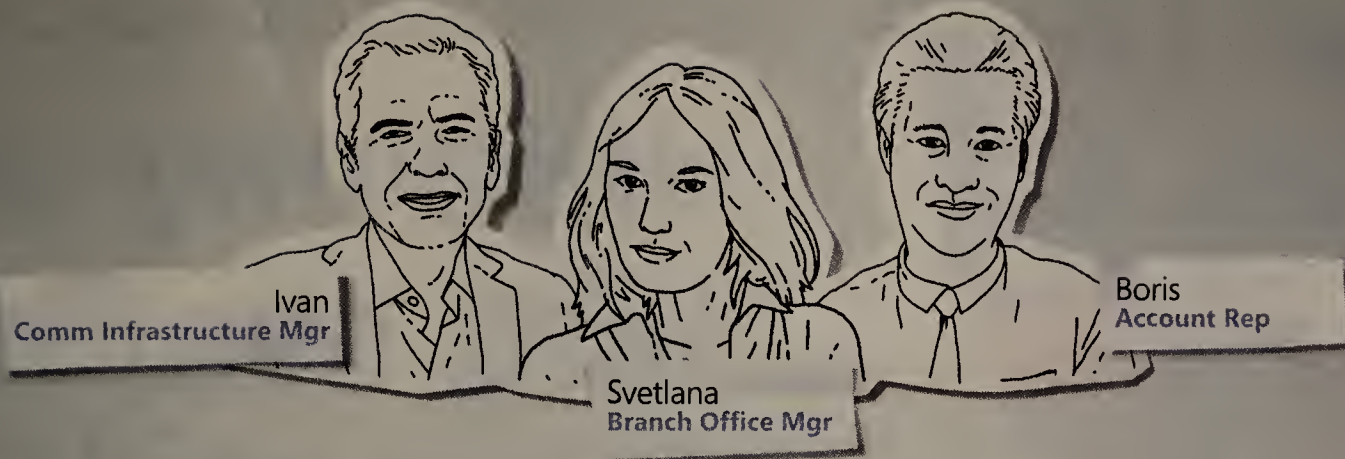
Phishing detection success rate



BASED ON 1,000 MESSAGES, 500 PHISHES, 500 LEGITIMATE. THE FACETIME APPLIANCE WE TESTED WAS NOT ABLE TO SCAN FOR PHISHES.

Latency while inspecting executable files for malware





Communicating, accessing
and sharing ideas
more securely.

Sometimes the information people need is on a drive; sometimes it's in someone's head. Deploy Microsoft® Unified Communications, SharePoint® and Forefront™ to help save money and enable your people to stay connected across the globe with secure access to the information they need. Your people will be able to seamlessly collaborate when, where and how they like, allowing ideas to flow safely and freely.

To learn more about how to make communication and collaboration efficient, more secure and easier to manage, go to itseverybodysbusiness.com/improve



Snap this tag to learn more
about secure collaboration or
text IMPROVE to 21710

Get the free app for your phone at
<http://gettag.mobi>

Because it's everybody's  business



Complex 10G Fiber Cabling

Step 1: *Plug* and Step 2: *Play*

HiPerlink
Fiber Optic

ICC's HiPerlink Fiber 'Plug and Play' Solution

In today's economy, it is vital to look for cost-effective ways to deploy reliable network systems and upgrades quickly. With ICC's pre-terminated fiber solutions, simply 'plug and play' fiber into any FTTx network architecture; data centers, network backbone or straight to the workstation and still save money.

Plug and Play

Install right out of the box with no hassle.

10 Gigabit Performance

Exceeds IEEE 802.3, IEC-60793-2-10, TIA/EIA 568-B.3 standards.

Superior Reliability

Low Insertion Loss of <0.3dB...exceeds the industry's average 0.75dB.

Built-to-Order

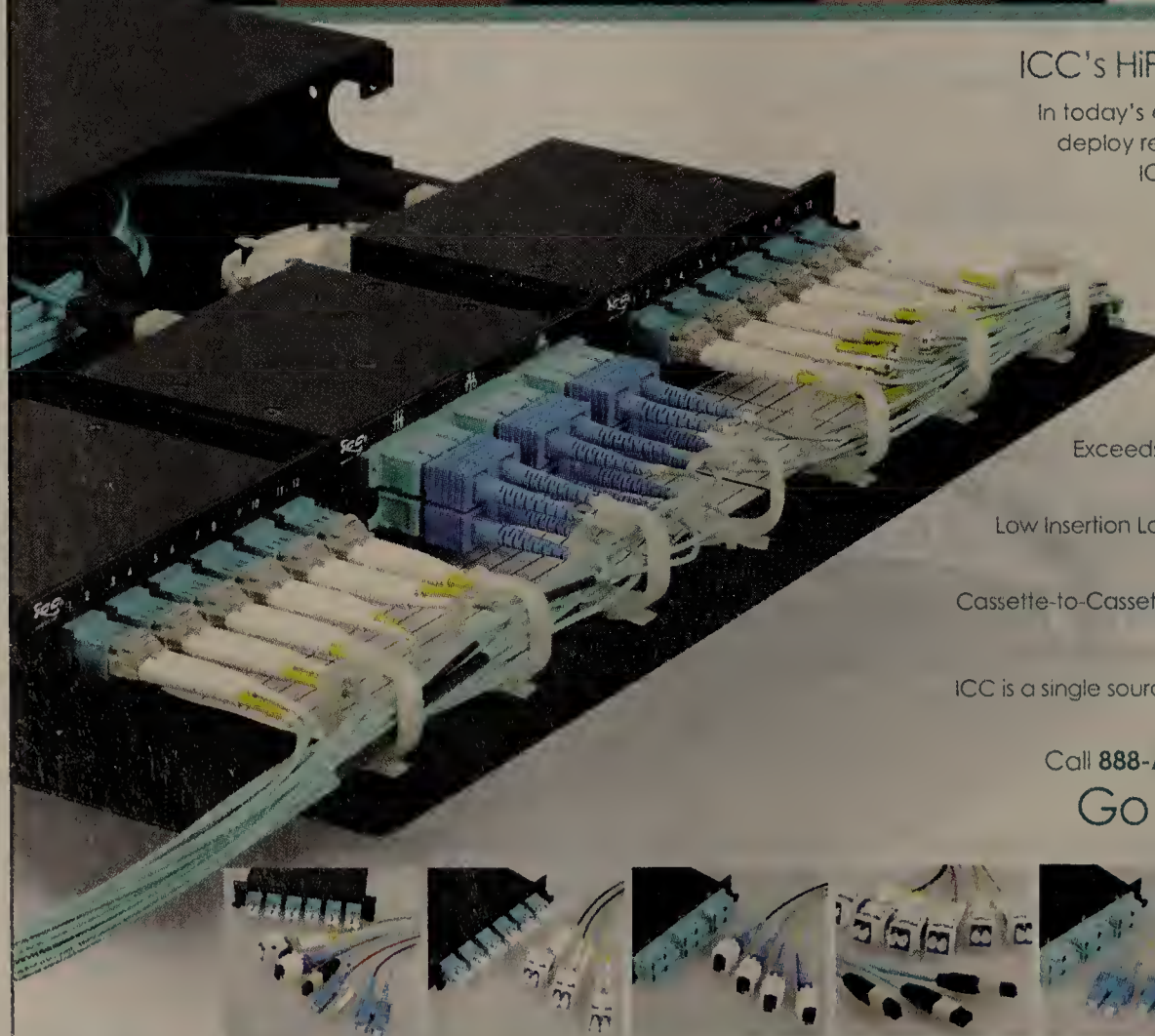
Cassette-to-Cassette, Cassette-to-Connectors, Cassette-to-Workstation.

Cost 40% Less Than Big Name Brands

ICC is a single source for all fiber components without the high markups.

Call 888-ASK-4-ICC extension 4000 and ask for a quote.

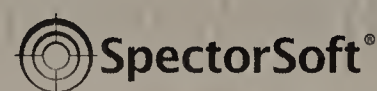
Go online www.icc.com/nw



Premium Products • Proven Performance • Competitive Prices...

ICC

Do you still believe that Filters work?



IT SECURITY WARNING: Internet Filters Cause a False Sense of Security by Failing to Monitor and Record EVERYTHING Your Employees do on their Desktop PCs.

Filtering software leaves your company's health at risk because it fails to monitor desktop computer activity. Employees can bypass content filters, install rogue applications, copy confidential information or worse... and it's all undetected.

Monitor Your Employees

Spector 360 is the only software that gives you the ability to monitor, record, archive and report all PC and Internet activity.

Nothing Gets Past Spector 360

Unlike filtering, Spector 360 captures EVERYTHING your employees do: web site visits, file transfers, emails, chats, IMs, application usage, keystrokes and so much more. Spector 360 even provides screen snapshots of employee PC and Internet activity that give undisputable proof or erase all doubt.

Where There's Smoke, There's Fire

Spector 360's easy-to-read and intuitive summary reports quickly identify employees conducting high-risk activity. See something suspicious? Drill down for a detailed employee-focused investigation that reveals every detail of their PC and Internet activity. Spector 360 even sends immediate alerts if your data is threatened.



September 2008
Spector 360

"Spector 360 is the most mature surveillance offering for business use."

— PC Magazine Editors' Choice

Monitor Your Employees and Protect Your Company Data with Spector 360

Call us today

1.877.288.5699

Visit us online

Watchwith360.com

Finally, custom data center capabilities without all the customizing.

Deployment-friendly design:
Optimizes space, installation, and deployment speed via standard features

Intelligent, low-profile rack PDU:
Enables easy equipment access and power monitoring and control at the rack level

High-density readiness:
Delivers superior cooling for blade servers and switches; handles large cable volumes

Any-IT compatibility:
Reduces the challenge of matching often-incompatible IT products

Only APC racks and rack PDUs deliver maximum flexibility.

A system for high-density data centers

Today's data centers run on virtualization and high-density processing. To keep up, you need rack enclosures and rack PDUs that allow you to adapt easily to ever-changing technologies. Only APC by Schneider Electric delivers rack enclosures and rack PDUs that are purposely designed as a system to enable integration of HD blade servers and large core switches, while also addressing corresponding power, cooling, and space challenges.

Easy-to-deploy design with any-IT compatibility

Even though APC's NetShelter SX enclosure and rack PDU system can accommodate a complex IT landscape, choosing and deploying the correct system couldn't be simpler. The integrated zero-U rear channels provide tool-less mounting of cable managers and low-profile rack PDUs, and the large-capacity cable managers allow simple routing and management of HD networking applications.

Best of all, the scalable system works seamlessly with *any* IT vendor's servers and equipment – meaning your data center can grow and adapt easily, no matter what changes technology brings.

The bridge to InfraStruxure

APC's rack enclosure/rack PDU system is the bridge to our complete InfraStruxure data center architecture. It's the essential first step toward building a truly flexible, efficient data center founded on Legendary Reliability.

APC Rack PDU Options:

Which APC rack PDU option is right for you?

Basic PDU

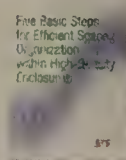
☒ Puts power in the rack enclosure near the equipment where it is needed most

Metered PDU

☒ Measures and monitors potential overloads, with alarm warning

Switched PDU

☒ Allows for remote management and control of individual outlets



Learn how to roll out your HD data center with a FREE copy of APC's White Paper #72: "Five Basic Steps for Efficient Space Organization within High-Density Enclosures."

Visit www.apc.com/promo Key Code n581w • Call 888-289-APCC x6126 • Fax 401-788-2797

APC
by Schneider Electric

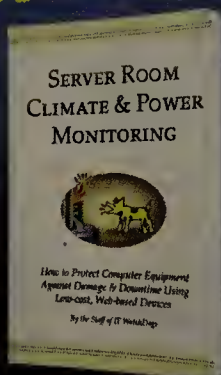
NEW!

MicroGoose Climate Monitor \$199

Built-in Web Interface
Temperature & Humidity
Power over Ethernet Enabled
E-mail Alarms & Escalations
SNMP, XML, HTTP, HTTPS
Optional IP Web Cams

MicroGoose
\$199

Receive our **FREE BOOK**
 by emailing us at
FreeBook@ITWatchDogs.com
 with your mailing address
 or call us at 512-257-1462



BE THE FIRST TO KNOW

Receive **INSTANT NOTIFICATION**
 when conditions threaten your
 server room

MINIMIZE DOWNTIME
 and keep your business running

COST EFFECTIVE and scalable
 for any size business

Monitor:

- Temperature
- Humidity
- Power Failure
- Water on the Floor
- Physical Security
- Video • Smoke & Fire

Notification:

- Phone Call • Text Message
- E-Mail • Snmp Trap

New
Low Cost
Solution



SENSAPHONE®
 REMOTE MONITORING SOLUTIONS
www.sensaphone.com

MADE IN THE
USA

877-373-2700

Looking for high performance OM3 10G fiber cables?

Optimized for 10Gbps networks up to 300M @ 850nm!

10G Fiber Multistrand Cables

Helps save time during installation
 MPO, LC, SC and other connectivity types
 Pre-built with multiple OFNR/OFNP laser optimized cables

10G Fiber Bundled Cables

Clean and organized installations with specific lengths
 MPO, LC, SC and other connectivity types
 OFNR/OFNP laser optimized cables

Aqua Fiber Adapters
 Identify 10G connections easily
 MPO, LC and SC types
 Integrated with metal sleeves

10G Fiber Jumpers
 Wide variety of lengths
 MPO, LC, SC and other connectivity types
 OM3 50/125µm Multimode
 Simplex and Duplex

**Cablesys will blow you away with our
 wide selections and superior services!**

- ★ 0.2dB or less Insertion Loss
- ★ Widest selection in stock
- ★ Live Customer Service
- ★ On-line ordering with same day shipping*
- ★ 3-year product warranty
- ★ Competitive prices



CABLESYS.COM

CompleteInventory • SuperiorService • SaveOnline
 Call 800.555.7176 E-mail cs@cablesys.com

*Visit Cablesys's website for detailed shipping information.

17-Outlet Power Strip w/LCD Display

15 Amp Model*

SALE PRICE

\$149 plus S&H

*20 Amp Model Also Available!

SHOWS: Volts, Amps, Watt, VA,
Frequency, Power Factor & KWH

Network Management System Remote Outlet Control

15 Amp Model*

SALE PRICE

\$395 plus S&H

Manage multiple network
devices via the Internet



A-Neutronics Inc. www.a-neutronics.com

purchase directly at
or call toll-free: **1-877-263-8876**

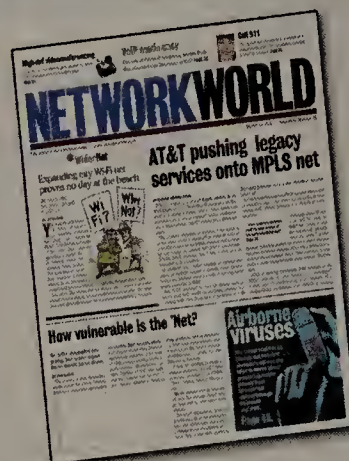
FREE information

advice | news | tips

Subscribe to Network World's free e-newsletters.

Network World offers more than 50 technology specific e-mail newsletters, written by experienced editors and industry experts. You can sign up for any of our newsletters by going to www.networkworld.com/nlsb

NETWORKWORLD®



Reading someone
else's issue of
NETWORKWORLD®?

Subscribe today and receive your own
1-year subscription for FREE –
a \$129.00 value!

Go to <http://apply.nww.com/free> for your free subscription.

Instantly Search Terabytes of Text

dtSearch

Instantly Search
Terabytes of Text

Desktop with Spider
Network with Spider
Publish (portable media)
Web with Spider
Engine for Linux
Engine for Win & .NET

includes
64-bit

- ◆ 25+ full-text and fielded data search options (with Unicode support for hundreds of international languages)
- ◆ Built-in file parsers / converters **highlight hits** in popular file types
- ◆ Spider supports static and dynamic web data; **highlights hits** with links, formatting and **images** intact
- ◆ API supports .NET, C++, Java, SQL, etc. .NET Spider API

The Smart Choice for Text Retrieval® since 1991

"Bottom line: dtSearch manages a terabyte of text in a single index and returns results in less than a second" – InfoWorld

dtSearch "covers all data sources ... powerful Web-based engines" – eWEEK

dtSearch "searches at blazing speeds" – Computer Reseller News Test Center

See www.dtsearch.com for hundreds more reviews, and hundreds of developer case studies

Fully-Functional Evaluations

1-800-IT-FINDS • www.dtsearch.com

Apple	3, 6, 10, 22
Aprigo	14
Avaya	8
BMC	14
Broadcom	8
CA	14
Cisco	8
Citrix	3
Cloud Engines	22
Concrete Software	10
DataViz	10
Dell	8
Dune Networks	8
Elastra	14
ExtraHop Networks	14
FaceTime	24
Fujitsu	8
Google	6, 8, 10
GroundWork	14
Handmark	10
HP	8, 14, 16
Hyperic	14
IBM	8, 16
layerX Technologies	14
Livescribe	22
McAfee	24
Microsoft	3
Novell	3
Psystar	6
Research in Motion	3, 10
RiverMUSE	14
Roku	22
SAP	8
Shortel	8
SIPfoundry	8
Skype	8
Splunk	14
Sprint Nextel	34
Sun	8
Symantec	24
Tandberg	8
Trend Micro	24
Vineyard Networks	14
Websense	24
Windmill Networks	14
Zenoss	14

■ Advertiser Index

Advertiser	Page #	URL
1&1 Internet AG	17	www.1and1.com
A-Neutronics	32	www.a-neutronics.com
APC/Schneider Electric	30	www.apc.com
AT&T	2	att.com/dhasecurity
BeyondTrust	35	www.beyondtrust.com/nw
Cablesys	31	cablesys.com
Cisco Systems	13	www.networkworld.com/community/borderless_networks
Citrix Systems Inc	7	Citrix.com/SimplicityIsPower
dtSearch Corp	32	www.dtsearch.com
Good Technology	21	good.com/iphone
*IBM Corp	18-19	ibm.com/engines/security2
ICC	28	www.icc.com/nw
IT Watchdogs	31	ITWatchdogs.com
Juniper Networks Inc	5	TheNewNetworkIsHere.com/control
Microsoft Corp	27	itseverybodysbusiness.com/improve
NEC Corp	36	www.nec.com/cases/rms
Qwest	9	qwestsolutions.com
Sensaphone	31	www.sensaphone.com
ShoreTel	11	shoretel.com/untangle
SpectorSoft Corp	29	Watchwith360.com
Trend Micro	15	trendmicro.com/thinkagain

These indexes are provided as a reader service. Although every effort has been made to make them as complete as possible, the publisher does not assume liability for errors or omissions.

*Indicates Regional Demographic

International Data Group

CHAIRMAN OF THE BOARD: Patrick J. McGovern

IDG Communications, Inc.

CEO: Bob Carrigan

Network World is a publication of IDG, the world's largest publisher of computer-related information and the leading global provider of information services on information technology. IDG publishes over 300 computer publications in 85 countries. One hundred million people read one or more IDG publications each month. Network World contributes to the IDG News Service, offering the latest on domestic and international

computer news.

Publicize your press coverage in Network World by ordering reprints of your editorial mentions. Reprints make great marketing materials and are available in quantities of 500 and up. To order, contact the YGS Group, (800) 290-5460 ext. 148 or e-mail networkworld@theygsgroup.com.

Network World Events and Executive Forums produces events including IT Roadmap, DEMO and The Security Standard. For complete information on our current event offerings, call us at 800-643-4668 or go to www.networkworld.com/events.

Periodical postage paid at Framingham, Mass., and additional mailing offices. Posted under Canadian International Publication agreement #PM40063731. Network World (ISSN 0887-7661) is published twice monthly by Network World, Inc., 492 Old Connecticut Path, Framingham, MA 01701-9002. **Network World** is distributed free of charge in the U.S. to qualified management or professionals. To apply for a free subscription, go to www.subscribeNW.com or write Network World at the address below. No subscriptions accepted without complete identification of subscriber's name, job function, company or organization. Based on the information supplied, the publisher reserves the right to reject non-qualified requests. Subscriptions: 1-877-701-2228. Nonqualified subscribers: \$5.00 a copy; U.S.—\$129 a year; Canada—\$160.50 (including 7% GST, GST#126659952); Central & South America—\$150 a year (surface mail); all other countries—\$300 a year (airmail service). Four weeks notice is required for change of address. Allow six weeks for new subscription service to begin. Please include mailing label from front cover of the publication. Network World can be purchased on 35mm microfilm through University Microfilm Int., Periodical Entry Dept., 300 Zeeb Road, Ann Arbor, Mich. 48106. **PHOTOCOPYRIGHTS:** Permission to photocopy for internal or personal use or the internal or personal use of specific clients is granted by Network World, Inc. for libraries and other users registered with the Copyright Clearance Center (CCC), provided that the base fee of \$3.00 per copy of the article, plus 50 cents per page is paid to Copyright Clearance Center, 27 Congress Street, Salem, Mass. 01970. **POSTMASTER:** Send Change of Address to Network World, P.O. Box 3090, Northbrook, IL 60065. Canadian Postmaster: Please return undeliverable copy to PO Box 1632, Windsor, Ontario N9A7C9. Copyright 2009 by Network World, Inc. All rights reserved. Reproduction of material appearing in Network World is forbidden without written permission. Reprints (minimum 500 copies) and permission to reprint may be purchased from Reprint Management Services at (717) 399-1900 x128 or networkworld@reprintbuyer.com. USPS735-730



■ Network World, Inc.

492 Old Connecticut Path,
Framingham, MA 01701-9002
Phone: (508) 766-5301

To Send E-Mail to NWW Staff

firstname_lastname@nww.com

CEO: Mike Friedenber

SVP, CHIEF CONTENT OFFICER: John Gallant

GROUP PUBLISHER: Bob Melk

PUBLISHER: Andrea D'Amato

Online Services

SVP ONLINE SERVICES: Gregg Pinsky

DIRECTOR ONLINE SERVICES: Elisa Della Rocco

MANAGER, ONLINE ACCOUNT SERVICES: Danielle Tetreault

Custom Solutions

SVP STRATEGIC PROGRAMS & CUSTOM SOLUTIONS GROUPS:

Charles Lee

Events

SVP, EVENTS: Ellen Daly

VP, EVENT MARKETING: Mike Garity

DIRECTOR OF EVENT OPERATIONS: Deb Begreen

Marketing

VP MARKETING: Sue Yanovitch

Ad Operations

SENIOR PRODUCTION MANAGER: Jami Thompson

ADVERTISING COORDINATOR: Maro Eremyan

Finance

VP FINANCE: Mary Fanning

Human Resources

SVP HUMAN RESOURCES: Patricia Chisholm

Circulation/Subscription

CIRCULATION MANAGER: Diana Turco, (508) 820-8167

IDG List Rental Services

DIRECTOR OF LIST MANAGEMENT: Steve Tozeski

TOLL FREE: (800) IDG-LIST (US only)/Direct:
(508) 370-0822

■ Sales

Northeast/Midwest/Central

REGIONAL ACCOUNT DIRECTOR: Elisa Della Rocco,
(201) 634-2300, FAX: (201) 634-9286

Southeast/Mid-Atlantic

REGIONAL ACCOUNT DIRECTOR: Jacqui DiBianca,
(610) 971-0808, FAX: (201) 621-5095

Northern California/Northwest

REGIONAL ACCOUNT DIRECTOR: Jessica Koch

Silicon Valley/Southwest/Rockies/Utah

REGIONAL ACCOUNT DIRECTOR: Coretta Wright,
(415) 267-4515

Marketplace/Emerging Markets-National

REGIONAL ACCOUNT MANAGER: Enku Gubaie,
(508) 766-5487

Online

ONLINE ACCOUNT DIRECTOR NORTHEAST/MIDWEST/

CENTRAL: Debbie Lovell, (508) 766-5491

ONLINE ACCOUNT EXECUTIVE, EAST: Gena Grossberg,
(201) 634-2315

ONLINE DISTRICT MANAGER, NORTHERN CALIFORNIA/
NORTHWEST/ROCKIES/UTAH: Katie Layng,
(415) 267-4518

ONLINE REGIONAL ACCOUNT MANAGER, SILICON VALLEY/

SOUTHWEST: Jessica Koch, (415) 267-4522

ONLINE REGIONAL ACCOUNT MANAGER, NORTHERN
CALIFORNIA/SOUTHWEST: Katie Albang 415-267-4510

Custom Solutions

NATIONAL PROGRAMS DIRECTOR: Adam Dennison

WESTERN PROGRAM DIRECTOR SOLUTIONS GROUP:

Karen Wilde, (415) 267-4512

EASTERN SALES DIRECTOR: Tom Grimshaw 508-988-6941

WESTERN SALES DIRECTOR: Karen Wilde 415-267-4512

■ Event Sales

DEMO

SVP, NETWORK WORLD EVENTS & DEMO: Neal Silverman,
(508) 766-5463

IT Roadmap

REGIONAL ACCOUNT DIRECTOR, WESTERN REGION:

Jennifer Sand, (415) 267-4513

REGIONAL ACCOUNT DIRECTOR, EASTERN REGION:

Michael McGoldrick, (508) 766-5459



BACKSPIN BY MARK GIBBS

Keeping us safe the Sprint way

I DON'T THINK anyone rational and not on medication would argue that the majority of us don't want to have to defend ourselves against bad guys. That, my friends, is why we have the police force, the military, the FBI, the CIA and other agencies tasked with keeping us safe.

And there's no doubt that the job of keeping us safe has become progressively tougher over the last few decades. Not only are there more of us, but we have become a more mobile society and we also communicate more often and over multiple channels.

This means that finding someone "of interest" and then tracking their whereabouts has become more difficult.

To address the challenges of a more mobile and connected society, it is therefore logical that we should look to the various technologies that got us into this situation. But it turns out that there are some aspects of using these technologies for managing public order that we just won't accept.

For example, to enforce the speed limits few of us obey we could legislate to have transponders installed in every vehicle so speeding could be easily detected and punished. After all, driving is defined as a social privilege and not a right. So, if we believe and agree that speed kills then surely we would do something about it. No?

Well, actually, the answer is no, we don't. We put in those ridiculously expensive cameras at intersections to trap people jumping lights and accept that as necessary for public order, yet monitoring people's driving speeds by instrumenting their cars or the highway is just not acceptable.

But what's interesting is that most citizens are against this kind of monitoring while, at the same time, they don't seem to care about other more nefarious monitors that are used to watch their behavior on the assumption they might be bad guys.

Consider, for example, Sprint. It has just come to light that Sprint Nextel cooperated with various security agencies and allowed them to locate cell phone users over 8 million times last year.

Apparently Sprint has a secret self-service Web site where anyone with an authorized account can enter a cell number and get information on the location of the device. Now, this wasn't 8 million customers but rather 8 million 'pings', so if there were, say, 1,000 pings per enquiry then something like 8,000 customers were tracked.

It turns out that the previous estimates of how often cell phones are used to track individuals was wrong by a couple orders of magnitude.

The existence of this service was revealed, for reasons unknown, by a Sprint manager, Paul Taylor, in October at the non-public Intelligent Support Systems conference on interception and wire tapping. Taylor commented that "the tool has just really caught on fire with law enforcement."

What should really concern us is this revelation is about one cell phone company and it is likely that all of the cell phone service providers have similar solutions in place.

Why should you care? Because with services like these there's a reflexive drive on the part of the security and law enforcement agencies to over-reach and do things that violate people's rights. Just consider the warrantless wiretapping that is still going on.

There is a fine line between working to maintain law and order and over-reaching, and when the likes of Sprint are all too willing to cooperate and make surveillance programs really easy to use and keeps them secret, we're obviously moving away from law and order and heading towards a controlled and monitored society that none of us should want. ■

Gibbs is located in Ventura, Calif. You can find him at backspin@gibbs.com.



NETBUZZ BY PAUL McNAMARA

Dragon's holiday gift ad won't win over parents

LISTEN UP, KIDS: Don't bother learning how to type; play more video games instead!

That's the cheery message from the makers of Dragon NaturallySpeaking being delivered to radio listeners in Boston, Chicago, Philadelphia, Seattle and San Francisco this holiday season. And a full-throated "bah, humbug" it deserves.

The commercial fails on a number of fronts: inflated claims, gender stereotyping, a misreading of its target audience, and annoying me.

Here's how the ad plays out: Mom and Clueless Dad are in a car talking about holiday presents for the "six students" — two kids and four cousins — "on our family gift list." Clueless Dad asks Mom what she has in mind.

Mom: "Since they all tell us how much homework they have, we can get them all Dragon NaturallySpeaking speech-recognition software. They can use Dragon for book reports, essays, doing research on the Web; they won't ever have to type again."

Never type again? That's when I swore at the radio. I understand that speech-recognition software has improved over the years, but don't tell me — or my kids — that there will be no need for typing any time soon. Not buying. And their aunts and uncles had better not be buying either.

Clueless Dad: "Wait? They talk and their computer types for them?"

That's right, Clueless Dad, they talk and their computer types. Clueless Dad — old reliable for advertising writers everywhere — will be around even longer than the need for typing skills.

Mom: "Yeah, do you think they'll like Dragon?"

We just finished establishing that Clueless Dad has never even heard of this technological marvel called speech-to-text software, yet Mom heartlessly presses him for validation of her plan, which — let's be honest — will go over like a new pair of socks with most young people? Not fair, Mom, let

Clueless Dad concentrate on the road.

Clueless Dad, winging it anyway: "A gift that will get schoolwork done faster and get them back to video games sooner? (chuckle) They'll love it. They'll love you."

In other words, win your child's heart by giving the gift of more Wii time.

Not only is that lousy parenting advice, it's a silly sales pitch. This software is being marketed and sold to parents, not children (hear any kids clamoring?). And in how many households is carving out more time for video games a goal ... of the grownups?

By the way, Dragon costs at least \$100 per copy, which means Mom and Clueless Dad are talking about a \$600-plus investment. And who can afford to spend that kind of scratch on nieces and nephews these days?

So Happy Holidays Mom, Clueless Dad and the marketers responsible for bringing both of you to my radio. Enjoy your lumps of coal.

Check every day?

Speaking of holiday shopping, we are being inundated as usual with offers of "expert advice" for us to pass along to readers so they may better protect themselves against identity theft. Here's a beauty offered by Identity Theft 911: "Check your bank and credit card statements and accounts every day to make sure each transaction is yours."

This strikes me as blowing by excessive and diving headlong into the paranoia pool. I mean, if you're checking all of your accounts every day, I would suggest that the prospect of identity theft ranks below the likelihood of Obsessive Compulsive Disorder on your list of problems. ■

Write to me every day if you so please. The address is buzz@nww.com.

Three Platforms. One Provider. Complete Privileged Access Control.



Introducing the new BeyondTrust.

A security strategy is only effective if it grows with your company. As enterprises deploy more Linux®, UNIX®, and Windows® in heterogeneous IT environments, managing sensitive data in these multi-platform infrastructures can be difficult, complex, and costly.

Meet the new BeyondTrust, a leading provider of Privileged Access Lifecycle Management solutions for heterogeneous environments. Our leading products protect sensitive and confidential data through an effective combination of privilege delegation, strict user access control, privileged password management, and secure audit trails. With solutions that prevent data breaches and achieve regulatory compliance, hundreds of Forbes 2000 companies rely on us to maximize their security while reducing complexity and administrative costs.

Try it free for 30 days at www.beyondtrust.com/nw

When it comes to managing risk, we have the key.

Copyright© 2009 BeyondTrust Software International, Inc. All rights reserved. BeyondTrust is a trademark of BeyondTrust Software International, Inc. UNIX is a registered trademark of The Open Group. Linux is a registered trademark of Linus Torvalds. Windows is a registered trademark of Microsoft Corporation. All trademarks are registered in the United States and/or other countries.

1-800-234-9072

NEC GIVES RMS WHAT IT NEEDS – VIRTUALIZATION FOR REAL RESULTS.

Revenue Management Solutions (RMS) runs one of the largest Microsoft® SQL Server® databases in the world. Their global econometrics consultancy includes some of the world's largest restaurant and retail chains. To handle the tremendous volume of data required to discover profit insights and provide pricing guidance for their clients, they've adopted virtualization solutions from NEC. Says John Oakes, "The reliability of NEC's technology lets RMS focus on growing our business." At RMS, virtualization is good econometrics.

John Oakes
Vice President, IT
RMS